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A TREATISE

ON

HARMONY

PART II

J. HUMFREY ANGER.

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A TREATISE
ON
HARMONY

(WITH EXERCISES)

BY

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IN THREE PARTS.

PART II.

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PART II.

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The titles of the above chapters refer to the *principal* subjects under treatment. In chapter xviii. Arpeggios, Pedals and Ground Basses are explained, and a brief reference is made to some of the more frequently employed chromatic chords.

ERRATA.

Page 189. 1st line, for 'pages 78 and 80,' read 'pages 119 and 121.'

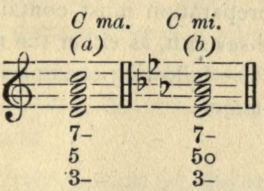
The example in the middle of page 290 has reference to § 188, and should appear at the bottom of the same page.

Page 327. 8th line from the bottom of the page, for '-IV,' read '-VI,'

CHAPTER XII.

SECONDARY SEVENTHS.

110. When a chord of the seventh occurs on any degree of the scale other than the dominant, it is called a **secondary seventh.*** All chords of the seventh are named after the *root* upon which they are constructed. The most important of the secondary sevenths is that formed on the supertonic, *the supertonic seventh.*



Unlike V7, which never varies in its formation, secondary sevenths differ according to the mode in which they occur. In the chord at *a*, the fifth is perfect, in that at *b*, it is diminished. The symbols for these chords are respectively II–7 (or simply II7) and IIo7.

111. The seventh, in secondary sevenths, not only resolves by *descending one degree*, but it must also be *prepared*, that is to say, it must be heard in the same part in the preceding chord. No rule is applicable to the third, except that it must never be omitted. The fifth is treated like the fifth in V7, and when it is omitted the root should be doubled. Should the Leading-

---

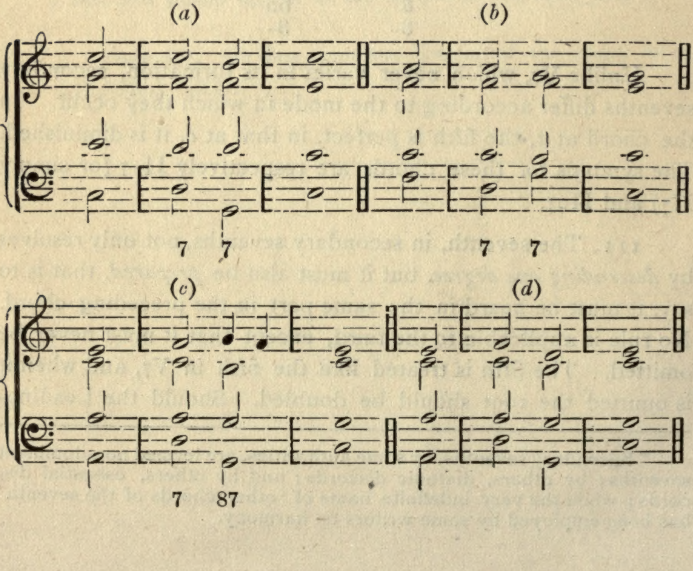
* Secondary sevenths, by some authorities, are termed non-dominant sevenths; by others, diatonic discords; and by others, essential discords; while the very indefinite name of 'other chords of the seventh' has been employed by some writers on harmony.

note occur in a secondary seventh, it is treated according to the position it occupies in the chord; unlike the progression of this note in V7, it rarely rises to the tonic. Speaking generally, it may be said that neither the third nor the fifth, nor indeed the root unless it is in the bass, should move disjunctly to the chord of resolution. No one note in particular in these chords is *best* in the treble; although the most convenient form for II7, as a general rule, is with the seventh in the treble, the fifth omitted and the root doubled.

Modern composers frequently introduce these chords with the seventh *not* prepared; students however, are strongly advised to follow the rules here given.

112. Secondary sevenths proceed naturally by roots *rising a fourth or falling a fifth;* II7, therefore, resolves on V or V7.

The chord of preparation must contain the note which is about to become the seventh, as either the root, the third or the fifth of the chord. The following examples illustrate the use of II7 in the key of C major.



The progressions at *a* and *b* (above) may be transcribed to the key of C minor, by employing the proper key signature, and by inserting a natural before the note B, each time it occurs.

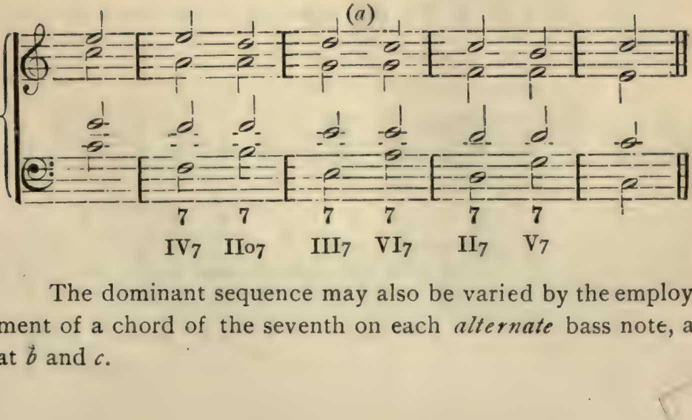
IIo7 is sometimes employed in the *major* mode, in which case it must be regarded as a chromatic chord, that is to say, a chord containing one or more notes which do not form part of the diatonic scale of the key. The fifth in this chord (IIo7), being diminished, must be resolved, as well as the seventh.

113. The **dominant sequence**, § 53, is frequently varied by the employment of chords of the seventh, as at *a*, where it will be seen—

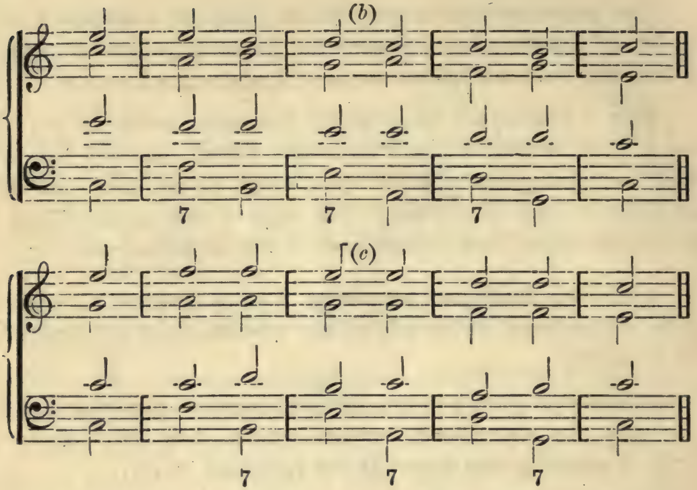
that the *third* of each chord becomes the note of preparation for the succeeding seventh which duly resolves by descending one degree in the following chord;

that each alternate chord (as a rule, when the seventh is in the treble) is *incomplete*, the fifth being omitted and the root doubled; and

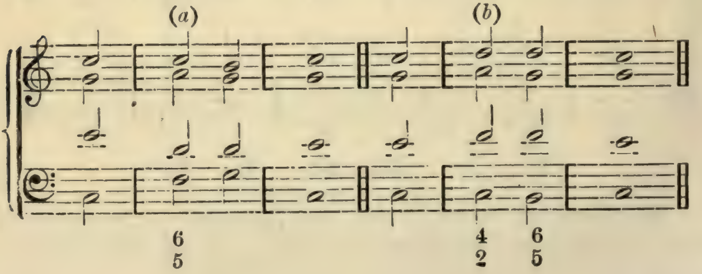
that in proceeding from a chord of the seventh, the upper parts *in no case move disjunctly;* each note either is repeated or falls a second, except the leading-note alone, which rises to the tonic.



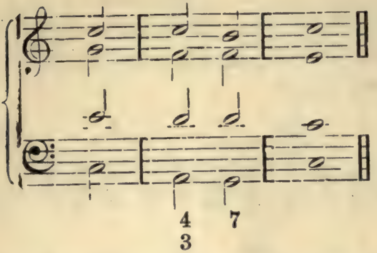
The dominant sequence may also be varied by the employment of a chord of the seventh on each *alternate* bass note, as at *b* and *c*.



114. Secondary sevenths have **three inversions**, the figuring of which is the same as that employed for the inversions of V7. Of these, the first and third inversions, *a* and *b*, are of frequent occurrence, but little use, comparatively speaking, is made of the second inversion, *c*. The inversions of II7, in the key of C, are shown in the following example, the chord of resolution being V or V7, the same as when II7 is in root position.



(*c*)

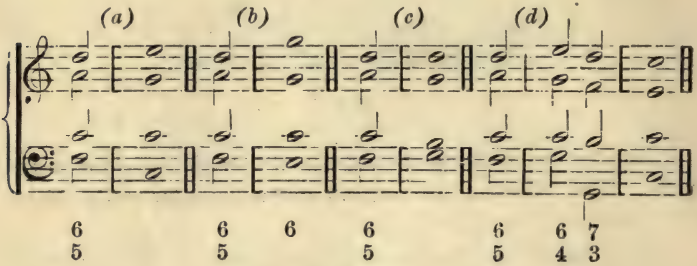


The above progressions are equally available in the minor mode. The effect of the second inversion is generally better when the bass-note is prepared.

115. The first inversion of II7 requires special consideration, for this chord is apparently exactly the same as the chord generally known as the '**Added sixth**'; the notes of these chords are indeed identically the same, the roots, however, are different, while the dissonant note in either chord is consonant in the other; by the chord of resolution alone, therefore, can these chords be distinguished.

The chord of the 'added sixth'—symbol IV+6 (or simply IV6) in the major mode, and IV–6 in the minor—is formed on the *subdominant*, and consists of a triad on that note, to which, as the name implies, *a sixth is added;* the sixth is therefore the dissonant note, but unlike fundamental discords, this note is more or less *free*, though it usually resolves by ascending one degree. The fifth in the 'added sixth' is, of course, a consonant note, being the fifth of the root, but in II7^1 the fifth is the dissonant note, being the seventh of the root. The 'added sixth' naturally resolves on to the tonic chord, as at *a*, and the progression may be regarded as a variation of the plagal cadence; this progression, if the supertonic were the root, would be bad. At *b* the 'added sixth' resolves on I^1. At *c*, the same chord is treated as II7^1, and therefore resolves on V, forming an imperfect cadence; this is simply another position of the progression at *a*, § 114.

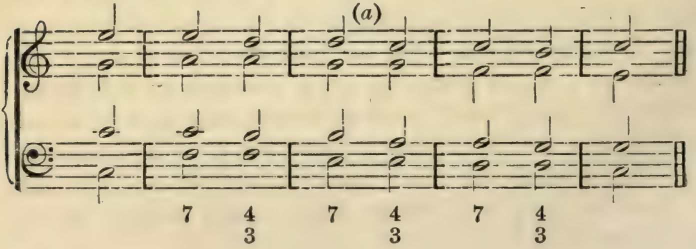
$II_7{}^1$, however, frequently resolves on to a cadential six-four, as at *d*, especially when II in the treble rises to III; the resolution of the seventh, in this case, is necessarily *deferred* until the following chord.

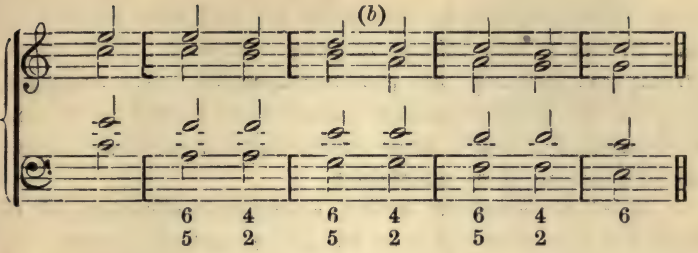


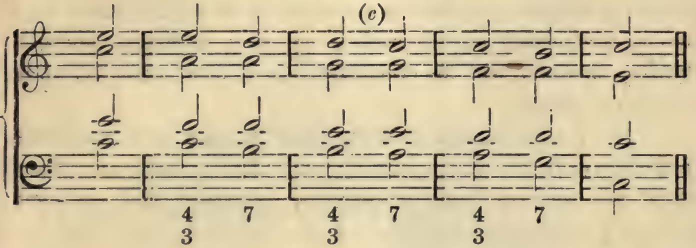
The above passage may be transcribed to C minor, the 'added' sixth (like II_7) being freely employed in both modes.

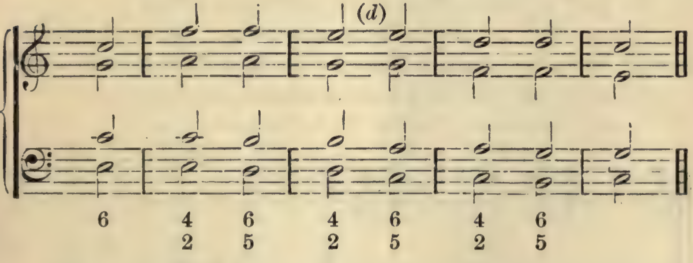
A chord of the 'added sixth' occurs also on the *tonic* of the major mode, but not on the tonic of the minor; this and other chords of a similar character, chords formed by the use of auxiliary notes, will be considered, in due course, in a later chapter.

116. The chords in the sequential passage of sevenths at *a*, § 113, may be inverted as shown in the following examples. It will now be seen that each chord of the seventh is *complete*, and that the bass, as well as the upper parts, proceeds by conjunct movement only.



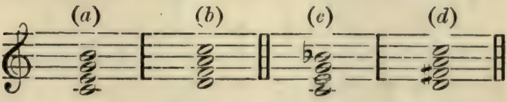






The passages at *b* and *c*, § 113, may also be inverted in a similar manner.

117. Secondary sevenths, unlike dominant sevenths, do not determine keys. The chord at *a*, in the following example,



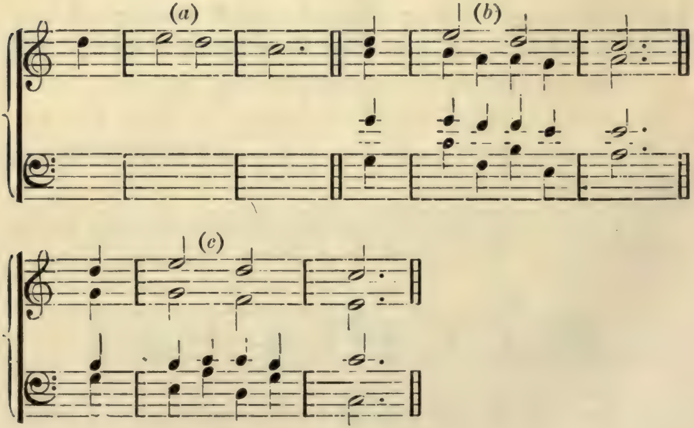
is not only I7 in C, it is also IV7 in G, and VI7 in E minor;

while the chord at *b*, besides being II7 in C, is also III7 in B flat, VI7 in F, and IV7 in A minor. Whereas, if the above chords are converted into *dominant* sevenths, by flattening the B in the first, and by sharpening the F in the second, as at *c* and *d*, the keys of F and G respectively, major or minor as desired, are at once and alone established.

When a secondary seventh is chromatically changed, as from *a* to *c*, or from *b* to *d*, in the above example, it does not, however, *necessarily* induce a modulation, in which case it is, of course, a *chromatic* chord, and is called a **primary seventh.** Primary sevenths will be considered in a later chapter, under chromatic chords.

118. In harmonizing **unfigured basses and melodies**, secondary sevenths may, speaking generally, be freely introduced when the seventh can be properly prepared and resolved; II7 being especially effective as a *pre-cadential* chord, that is to say, the chord which precedes the perfect cadence.

When two or more notes occur in a descending scale passage, as at *a*, chords of the seventh may often be introduced by employing two chords for each note, as at *b* and *c*.



In other respects the tables given on pages 78 and 80 may be followed; while the harmonic progressions which have been given in the chapters on the common chord and its inversions will still and always remain the basis upon which melodies, in whatever voice or part they may occur, should, as a general rule, be harmonized.

SUMMARY.

§ 110. Secondary sevenths generally.

The most important being the supertonic sevenths, II7 and IIo7.

§ 111. The treatment of the seventh.

It not only resolves by falling one degree, but it must also be prepared.

§ 112. Root progressions.

Rising a fourth or falling a fifth.

§ 113. The dominant sequence.

The third in each chord prepares the seventh in the next.

§ 114. The three inversions.

The $\begin{smallmatrix}6\\5\end{smallmatrix}$ and $\begin{smallmatrix}4\\2\end{smallmatrix}$ of common occurrence, the $\begin{smallmatrix}4\\3\end{smallmatrix}$ rarely employed.

§ 115. The 'Added sixth.'

It resembles $II7^1$ but resolves upon I or I^1 instead of V.

§ 116. Sequences of inverted chords of the seventh.

No disjunct movement; all parts either repeat or fall a second.

§ 117. Primary sevenths other than V7.

Chromatic chords, most frequently found on I and II.

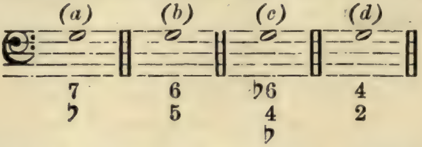
§ 118. Unfigured basses and melodies.

Secondary sevenths may be freely employed provided the seventh is prepared and resolved.

EXERCISES.

I.

1. Name the three major keys to which each of the following chords belongs, and give the symbol for each chord.



2. Write and resolve the supertonic seventh and its inversions in the keys of A major and A minor.

Introduce and resolve the following supertonic sevenths. Each example should consist of four chords, viz., a chord of preparation, the given chord, the dominant or dominant seventh, and the tonic.

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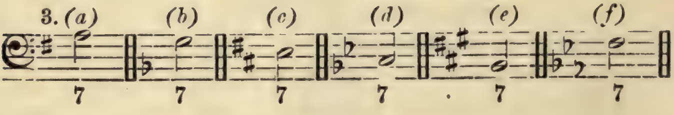

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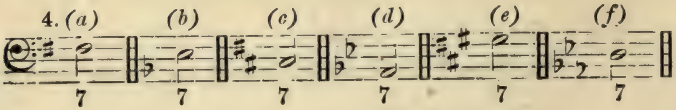

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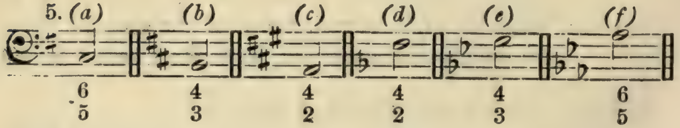

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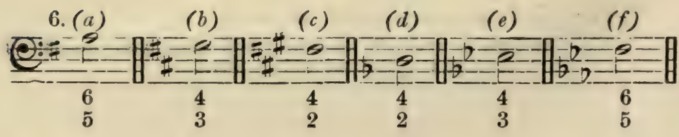
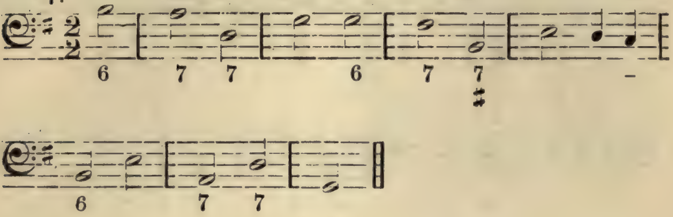


Add treble, alto and tenor parts to the following basses.

7.



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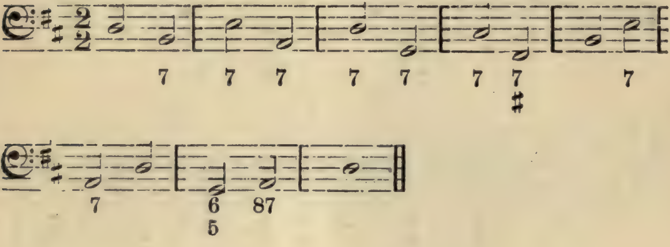

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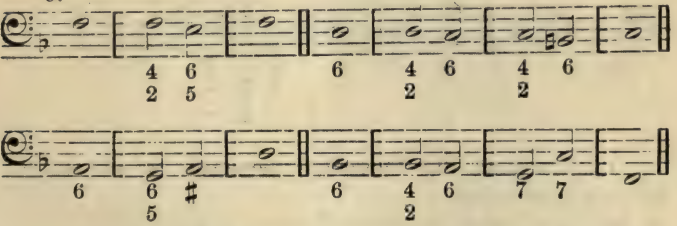

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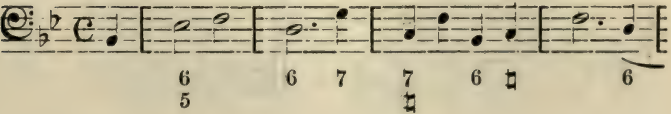

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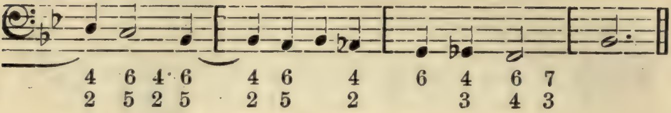

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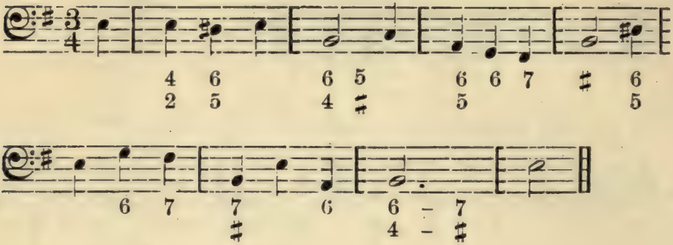

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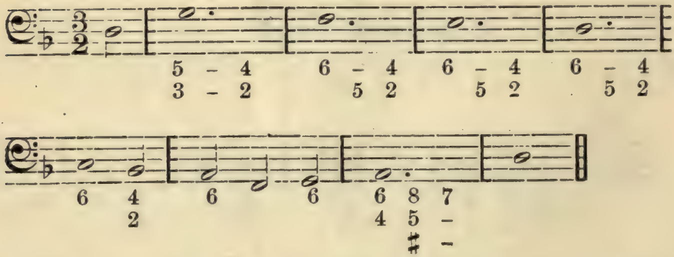
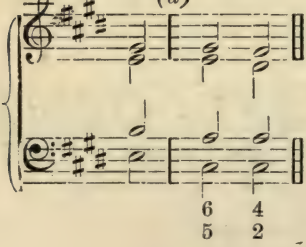


14. Continue the following passages as sequences of secondary sevenths.

(a)



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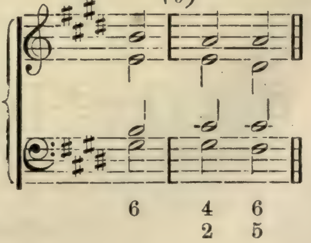

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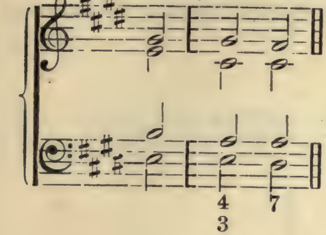

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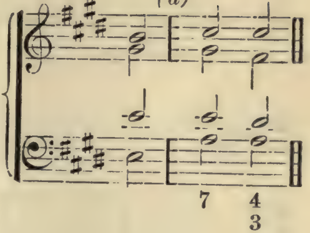
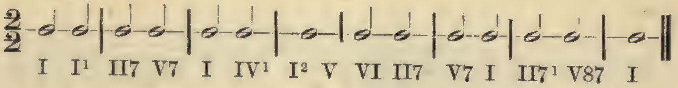


Clothe the following blank rhythms with harmony, employing the chords indicated by the symbols.

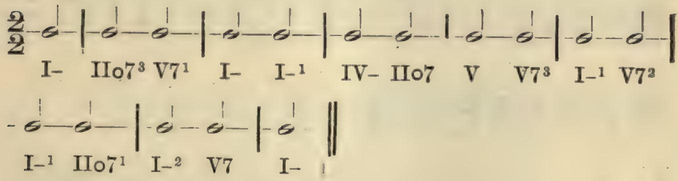
In the key of F.

15.



In the key of E minor.

16.

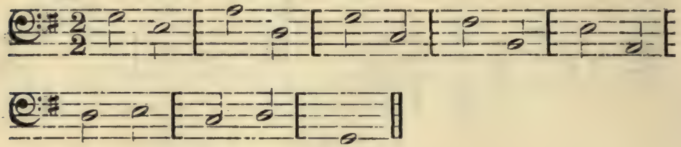

I– $IIo7^3$ $V7^1$ I– $I–^1$ IV– IIo7 V $V7^3$ $I–^1$ $V7^2$
$I–^1$ $IIo7^1$ $I–^2$ V7 I–

17. Explain the difference between (a) a dominant and a secondary seventh; (b) a primary and a secondary seventh; and (c) a primary and a dominant seventh. Give examples.

18. Write and resolve the chord of the 'Added sixth' in the keys of G major and G minor; and then re-write the same, but resolve them as supertonic sevenths.

Harmonize the following unfigured basses, introducing secondary sevenths.

19.



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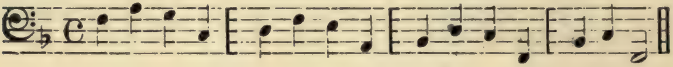

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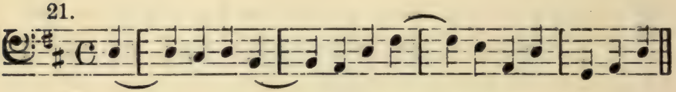

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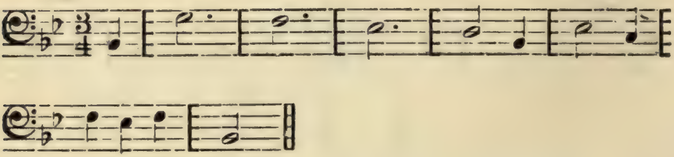

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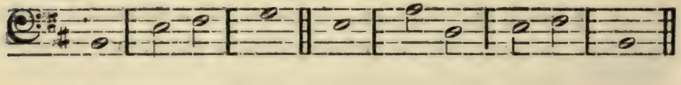

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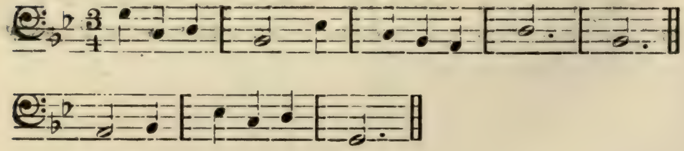
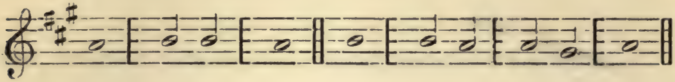


Harmonize the following melodies, introducing secondary sevenths.

25.



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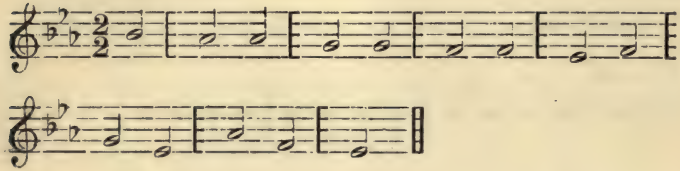

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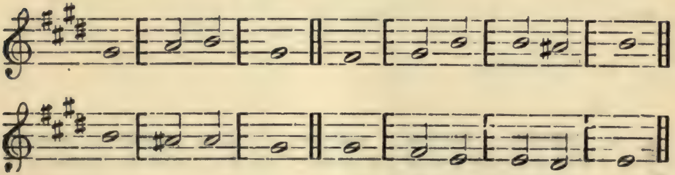

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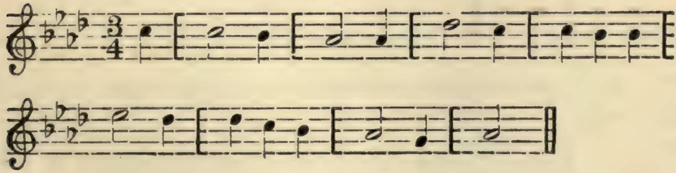

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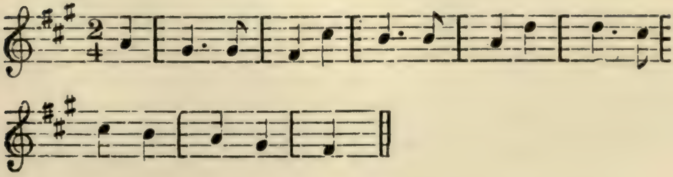

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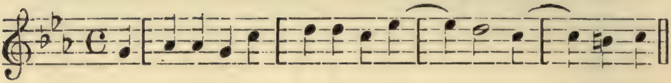
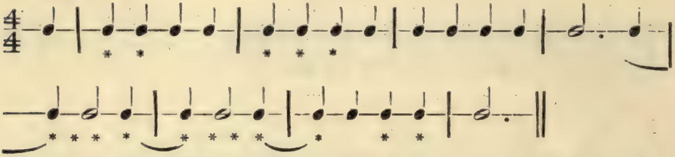


Clothe the following blank rhythms with harmony, introducing chords of the seventh at the beats marked with an asterisk.

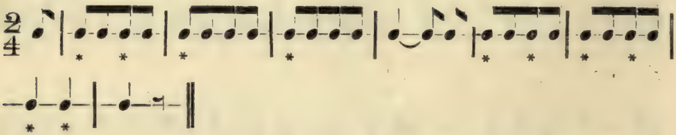
In B flat.

31.



In B minor.

32.



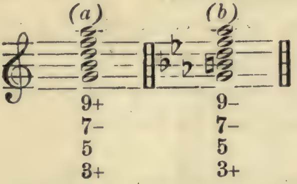
33. Compose a double chant, or a hymn-tune, in the key of D flat.

34. Write a short passage, ten or twelve measures of common time, in the key of G sharp minor.

CHAPTER XIII.

CHORDS OF THE NINTH.

119. A chord of the ninth is formed by adding yet another third to a chord of the seventh. The most important chord of the ninth is that formed on the dominant, and hence called the **dominant ninth**; other chords of the ninth are called *secondary* ninths. Unlike V7, which never varies in its construction, the dominant ninth differs according to the mode in which it occurs. In the major mode (*a*) the ninth is a major interval, in the minor mode (*b*) this interval is minor.



The **symbols** for these chords are V9+ (or simply V9) and V9− respectively.

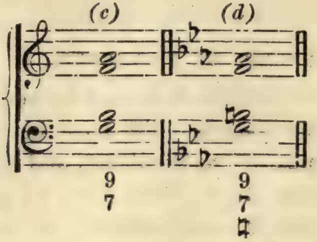
V9+ is figured $\begin{smallmatrix}9\\7\\3\end{smallmatrix}$ (the 5 being omitted), but this is usually contracted to $\begin{smallmatrix}9\\7\end{smallmatrix}$, the 3—representing the leading note—being understood.* In V9− an accidental (either a sharp or a natural, but in no case a flat) is employed instead of the 3.

As chords of the ninth contain five different notes, one of these, *the fifth of the root*, is necessarily *omitted* in four-part harmony. The *seventh* must always be present, and the *third* should rarely be omitted.

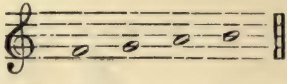
---

* Some authorities contract the figuring to 9, but this leads to ambiguity, as will be seen in Chap. XV, where it is shown that the figure 9 indicates the 98 suspension, with deferred resolution, the seventh not being present.

These chords, as they occur in the keys of (*c*) C major and (*d*) C minor, are shown in the following example.



120. It will be seen that the notes of which V9 consists form a scale passage, being IV, V, VI and L, of the diatonic scale. If these consecutive notes were sounded simultaneously the effect would be harsh in the extreme. In order to avoid this feature of harshness, two things are necessary, viz.:



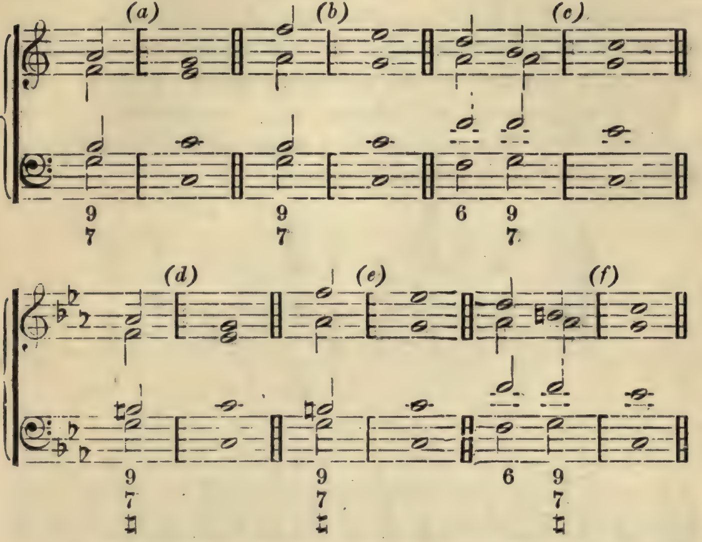
1. The ninth should, in no case, be placed a *second above the root*; and
2. The ninth, if placed *below the third*, should, as a rule and especially in the major mode, be *prepared.*

121. The natural **resolution** of V9 is to the tonic chord. The ninth resolves by *descending* one degree, while the third and seventh, as in V7, respectively rise and fall one degree.

V9 being a fundamental discord, the ninth does not require preparation. When possible, it is generally best to prepare it; when not possible, it should as a rule be approached from the nearest note below.

The natural resolutions of V9 in the key of C, are shown at *a* and *b*; at *c*, the ninth (prepared) occurs below the third;

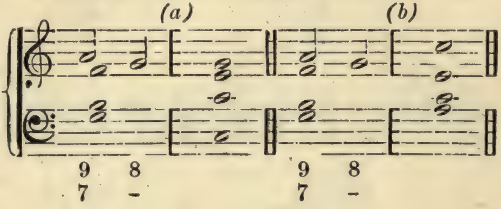
at *d*, *e* and *f*, the same progressions are transcribed to the key of C minor.

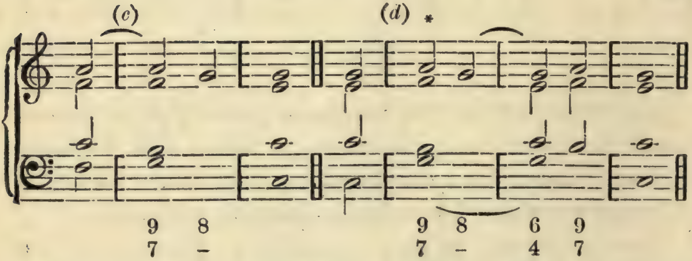


122. The ninth in V9 is frequently resolved while the other notes of the chord remain *stationary*, in which case, however, the chord ceases to be a true dominant ninth, for, to all intents and purposes the chord becomes a *discord by suspension.*

Suspensions will be duly explained in Chapter XV, but they may be briefly defined in the present connection. The notes immediately above and below any given note are called respectively its upper and lower *auxiliary notes*, and a **suspension** is the *temporary displacement of a note* by one of these auxiliary notes. The auxiliary or displacing note in a suspension proper must be heard in the same part in the preceding chord, that is to say, the suspension must be *prepared*, but unprepared suspensions (as they are sometimes called) or accented auxiliary notes (as they should more properly be called) are also of frequent occurrence.

At *a*, the ninth resolves while the other notes remain stationary, the chord is thus changed to V7. and resolves accordingly; or it may be resolved as at *b*, the deceptive resolution of V7; at *c*, this form of resolution is treated as a suspension, the A being prepared in the preceding chord; while at *d*, the A, not being prepared, may be regarded as an accented auxiliary note, the chord here proceeds to a pedal six-four, followed by another V9, resolving naturally upon I.

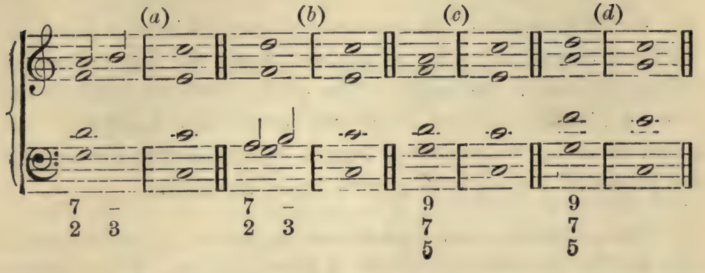




The above progressions are equally available in the key of C minor.

123. In the following example, in the chord at *a*—a chord which is apparently V9—the fifth is present, the third absent, and the ninth *rises* one degree in resolution. This chord, however, is not V9, it is V7 with the third (L) *temporarily displaced* by its lower auxiliary note. The correct figuring in this case is $\genfrac{}{}{0pt}{}{7-}{23}$, and not $\genfrac{}{}{0pt}{}{9 3}{7 -}$, nor $\genfrac{}{}{0pt}{}{9\ 10}{7\ -}$, as might perhaps be supposed, for the A could with equally good effect appear in the tenor as at *b*, which, if the chord were V9, would be absolutely incorrect.

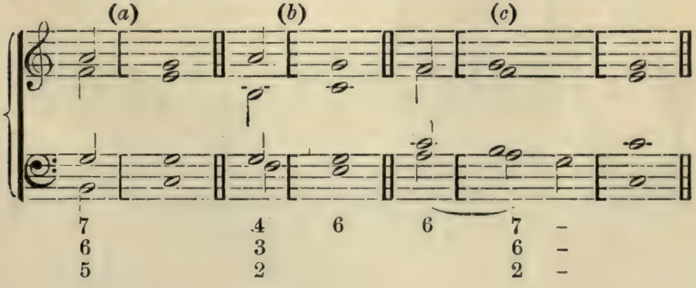
The symbol for this chord is $\underset{2}{\mathrm{V}}7$.



In modern compositions the third in V7 is sometimes *absolutely displaced*, as at *c*, which is a variation of the progression at *a*. The chord at *d* is another example of the same, but here the A falls, and the chord may be regarded either as V9 with the third omitted, or as V7 with the third absolutely displaced; preferably the latter, for the third should not be omitted from V9, while a displacement is not an omission.

The chords at *c* and *d*, in the above example, especially that at *c*, must be employed with considerable discretion by the student, and their use at examinations is certainly not to be recommended.

124. V9 has four **inversions**; of these the first (*a*) and the third (*b*) are the most frequently employed; the second inversion is rarely, if ever, used, as the presence of the fifth would necessitate the omission of the leading note; the fourth inversion (*c*) can only be used when the bass is treated as a suspension.

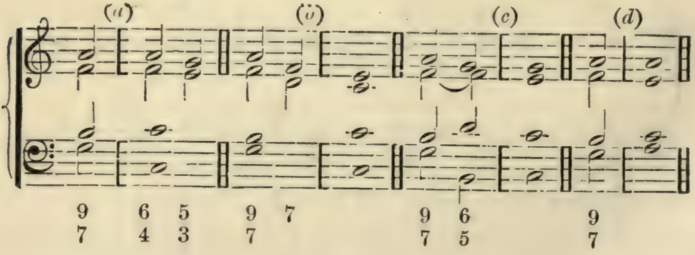


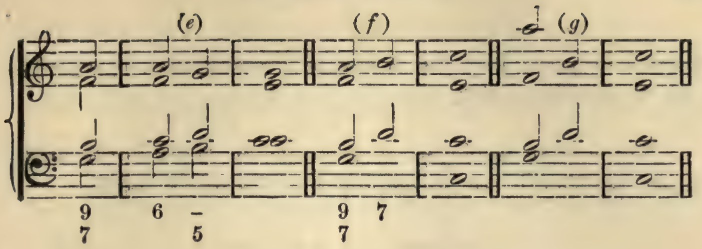
In the minor mode the inversions are equally available, though, as a matter of fact, they are rarely employed.

In the inversions, just as when the chord is in root position, the ninth may, if desired, be resolved while the other notes of the chord remain stationary. The ninth, however, must in no case be placed a second above the root; and except in the fourth inversion, it should not appear below the root, nor, unless it is prepared, should it be placed below the third.

The root of the chord must always be present in the inversions, otherwise the characteristic interval of the ninth is lost. Many authors allow the omission of the root in the inversions, in which case *a new chord arises*, a chord which will be considered in the succeeding chapter.

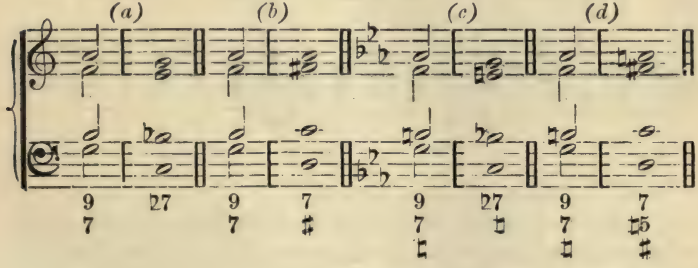
125. The example following illustrates some **additional resolutions** of this chord. At *a*, V9 proceeds to a cadential six-four on the tonic, the six-four, in this case, having the effect of a double suspension; at *b*, V9 is resolved ornamentally; at *c*, V9 proceeds to its first inversion, but the ninth resolving at the same time the chord becomes $V7^1$; the stationary resolution of the ninth, not often used, is shown at *d*; an interesting ornamental resolution of V9 is shown at *e*, where, in the second chord, the tenor and bass notes have the effect of being passing notes; the resolution at *f* is very exceptional, this is the only case in which, the leading-note being present, the ninth is allowed to rise; this resolution (*f*) is occasionally varied, as at *g*.

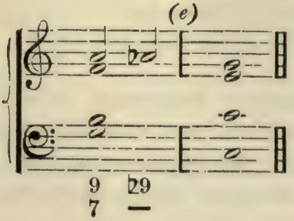




Of the above progressions, *a*, *b*, *c*, *d* and *g* may be transcribed to the minor mode; but the progressions at *e* and *f* are rarely used in the minor mode on account of the augmented second which would result in each case.

126. The principal **chromatic resolutions** of V9 are shown at *a* and *b*, and similar resolutions of V9– are shown at *c* and *d*. The chord of resolution in each case is V7, the roots moving a perfect fourth or fifth. These chords, it may here be said (see § 117) are the principal primary sevenths of the key.

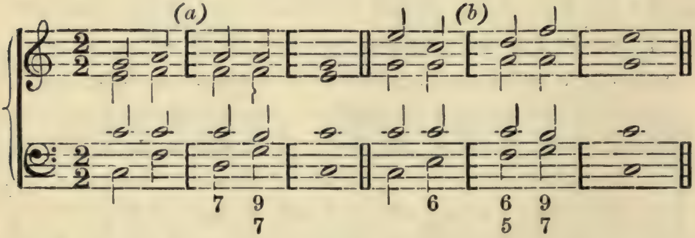




At *e*, V9+ is chromatically changed to V9–, after which it resolves upon I+; the A flat, in this case, may be regarded as a chromatic passing note.

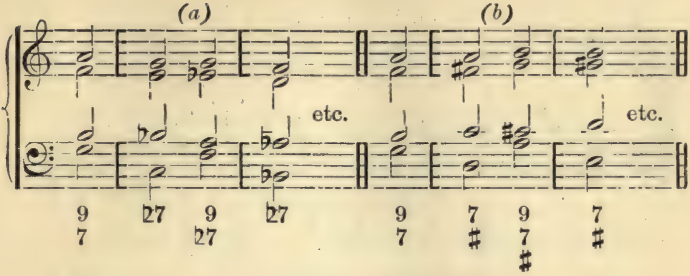
V9– is often employed as a chromatic chord in the major mode, but V9+ is not so employed in the minor mode.

127. The best **progressions** *to* V9 are from I, I¹ and I² (as a pedal six-four), II and II¹, IV and IV¹, in the major mode, and from the same chords, except II, in the minor. Of chords of the seventh, II7 to V9 is the strongest progression; this progression is illustrated at *a* and *b*, in C major, but it is equally available in the minor mode. V9 may also be preceded by V or V7, the effect, however, can scarcely be regarded as a harmonic progression.



128. V9 is rarely employed in **cadences**, though sometimes employed instead of V7 in the perfect cadence, but even in this case the ninth is almost invariably treated as *a suspension* of the octave; in this connection see also § § 122 and 123.

The most important **sequences** arising from the use of V9 are formed by chords, the roots of which move a perfect fourth or fifth. The (real) sequences at *a* and *b* are both formed by means of the chromatic resolution of V9, that at *a* being a variation of the dominant sequence.

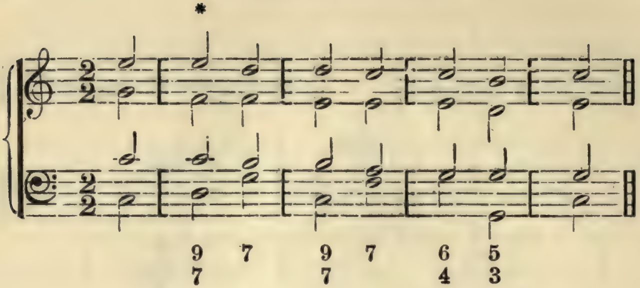


129. Secondary sevenths may be converted into **secondary ninths** by the addition of the ninth of the root, the fifth of the chord, as in V9, being omitted. The most important chord in this class is that on II, see * in the following example; this chord, II9, like II7, naturally resolves upon V or V7. The secondary ninth on L, being extremely harsh, is generally avoided.

The ninth, as well as the seventh, in these chords, should invariably be *prepared*; in other respects secondary ninths are treated like V9, little use, however, being made of the inversions. These chords are rarely employed in the minor mode on account of the augmented second between the sixth and seventh degrees in the harmonic minor scale.

V9+ and V9−, through theoreticlaly *primary* ninths, are always called dominant ninths. The term primary ninth is alone employed to designate a chord which has been chromatically changed from a secondary ninth to a chord having the appearance of a dominant ninth, but which, like a primary seventh, does not induce a modulation, and is therefore a chromatic chord.

The following passage exemplifies the use of the two most important secondary ninths in the key of C, introduced sequentially, and alternating with chords of the seventh.



130. Chords of the ninth, especially secondary ninths, offer the composer an opportunity to employ some of the most discordant combinations in the realm of diatonic harmony. These chords should, therefore, be used with discretion, for the effect of a progression does not depend alone upon its correctness, it depends also upon its aptness, which is largely due to a pleasing contrast in tone-color. The judicious employment of the dissonant element in music can alone ensure the true appreciation of the consonant element.

In harmonizing **unfigured basses** and **melodies**, chords of the ninth may be introduced whenever their correct preparation and resolution can be effected. They should not be introduced at every opportunity, but should be reserved for occasional use, once, or at the most twice, in a phrase of four measures, and only then provided that the progressions of the vocal parts are natural and melodious.

SUMMARY.

§ 119. Chords of the ninth generally.

The fifth of the chord is usually omitted.

§ 120. The constituent notes of V9 — IV, V, VI and L.

The ninth must not be placed a second above the bass, and if placed below the third, must be prepared.

§ 121. The natural resolution of V9.

Both the ninth and seventh fall, and the third (L) rises.

§ 122. The ninth treated as a suspension.

A frequently employed form of resolution.

§ 123. The chord of the dominant second and seventh.

The second, which in this case is not a ninth, rises to the third.

§ 124. The inversions of V9.

The first, $\begin{matrix}7\\6\\5\end{matrix}$, and third, $\begin{matrix}4\\3\\2\end{matrix}$, are chiefly used.

§ 125. Various additional resolutions.

Stationary, ornamental and exceptional treatments of the ninth.

§ 126. The principal chromatic resolutions.

To primary sevenths on I and II.

§ 127. The best progressions to V9.

From any triad which does not contain L, except VI.

§ 128. V9 in cadences and sequences.

Rarely employed in the former, and in the latter only when the sequence is real.

§ 129. Secondary ninths.

Both ninth and seventh should be prepared. By chromatic change these chords are frequently converted into primary ninths.

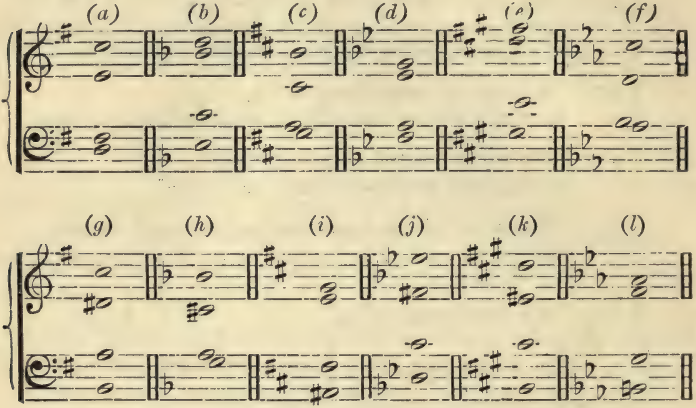
§ 130. Unfigured basses and melodies.

Chords of the ninth may be introduced whenever their correct preparation and resolution can be effected.

EXERCISES.

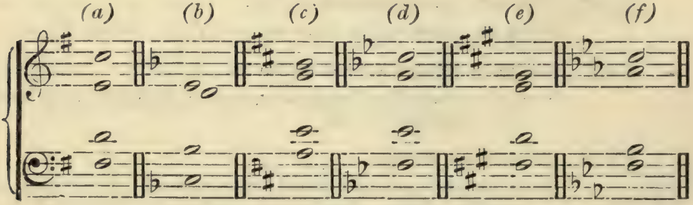
I.

1. Introduce and resolve the following chords, and in each case figure the bass and give the roots.

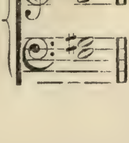


2. Write and resolve $V9^{1}$ in E; $V9^{5}$ in A flat; $V9^{1}$ in C sharp minor; and $V9^{3}$ in F minor.

3. Criticise the distribution of the parts in the following chords.



4. Resolve this chord in at least six different ways *diatonically*, and in two different ways *chromatically*.

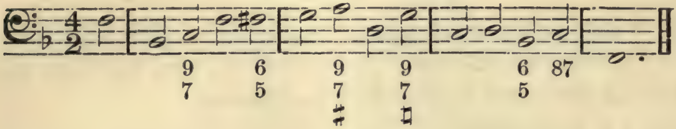


5. Introduce and resolve the secondary ninth on the supertonic in the key of A.

6. Write a variation of the dominant sequence, commencing in the key of E flat, employing primary sevenths and major ninths and repeating the model at least three times.

Add treble, alto and tenor parts to the following basses.

7.



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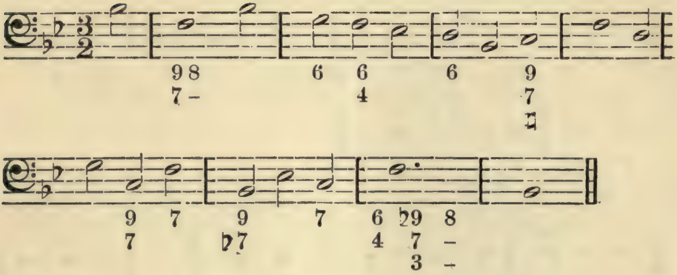

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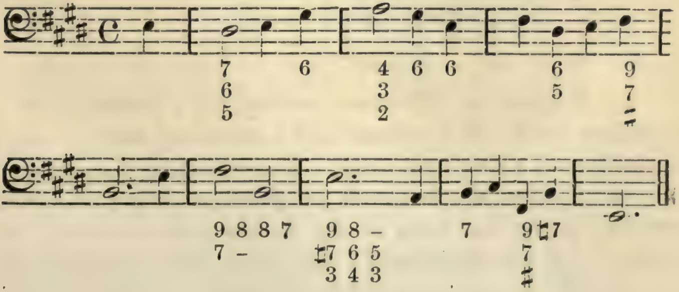

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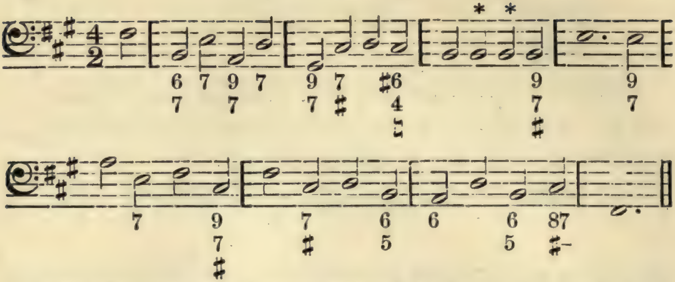
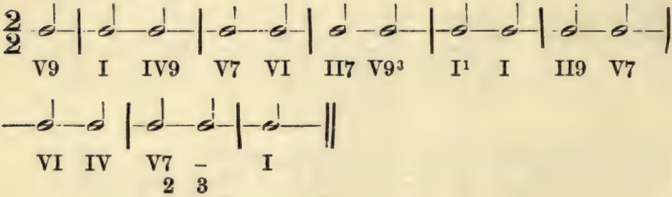


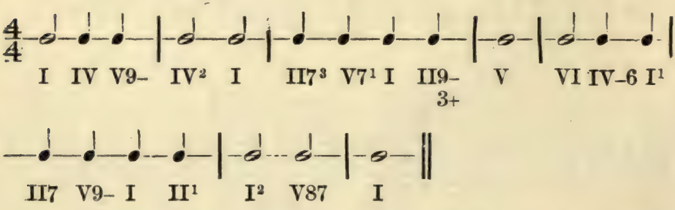
* The positions of the upper parts should be changed at these beats.

Clothe the following blank rhythms with harmony, employing the chords indicated by the symbols.

11. In D major.

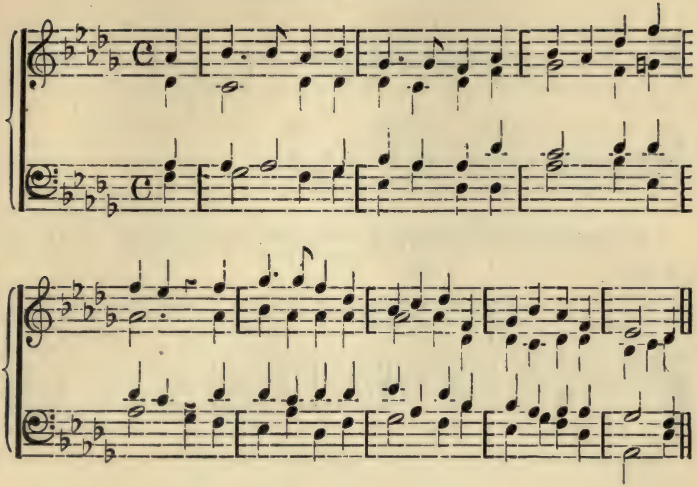
12. In G minor.





13. Explain the difference between (a) a dominant and a secondary ninth; (b) a primary and a secondary ninth; and (c) a primary and a dominant ninth. Give examples in A major.

14. Analyse the harmonic progressions in the following exercise, giving the roots of the chords and explaining the character of the resolutions. Also write and figure the bass, and give the correct symbol for each chord.



II.

Harmonize the following unfigured basses, introducing chords of the ninth.

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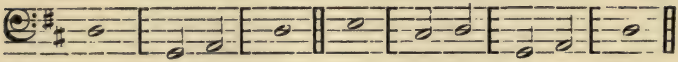

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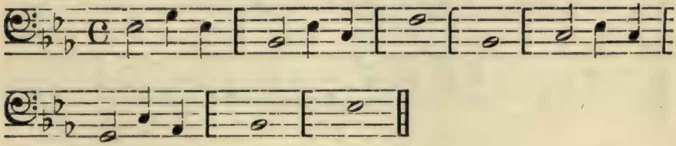

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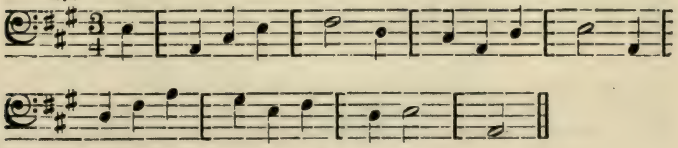

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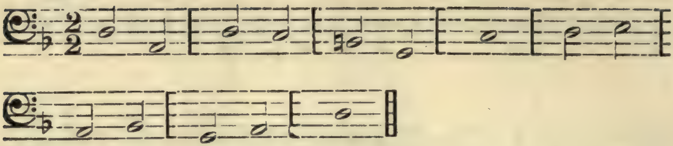
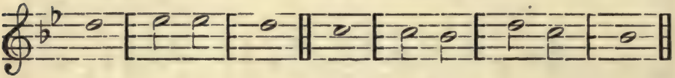


Harmonize the following melodies, introducing chord of the ninth.

19.



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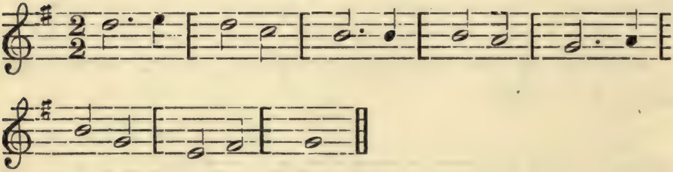

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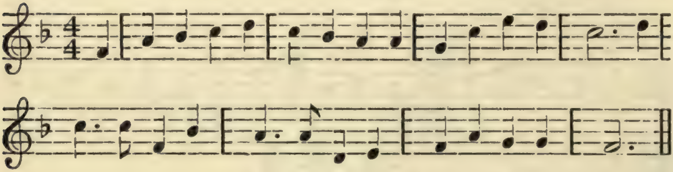

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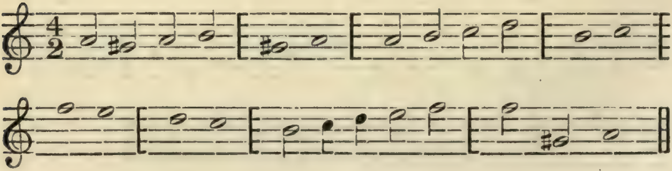
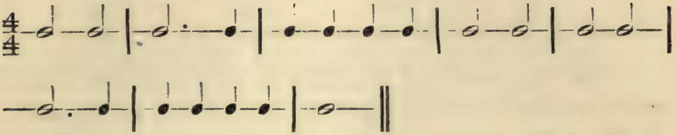


Clothe the following blank rhythm with harmony, introducing secondary sevenths and secondary ninths.

23. In E major.

24. In F minor.



25. Write a passage, regardless of rhythm, in the key of B, introducing an example of each of the discords which have thus far been considered, and concluding with the 'added sixth' form of the plagal cadence.

CHAPTER XIV.

THE DERIVATIVES OF V9.

131. If, instead of the fifth, the root is omitted from the chord of the dominant *major* ninth, a chord of the seventh on the leading-note is obtained; this is called the chord of **the Leading seventh,** but it might *more properly* be termed the chord of **the Minor Seventh** on L.

Similarly, if the root is omitted from the chord of the dominant *minor* ninth, a chord of the seventh on the leading-note of the minor key is obtained; this is called (from its distinctive interval) the chord of **the Diminished seventh.**

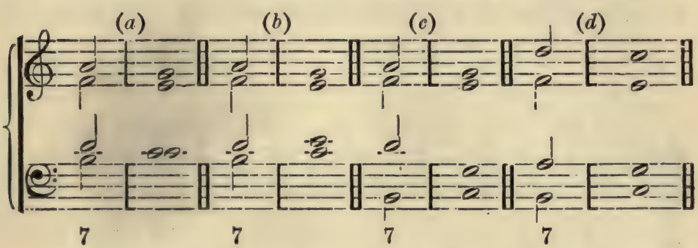
These chords are said to be *derivatives* of the dominant ninth. The leading-note in each case is regarded as the nominal root, while the dominant—the actual root—is said to be the generator; the term generator (see also § 90) signifying a note from which a chord is derived when that note is not employed in the chord.

The **symbols** for these chords are respectively L7 and L7o.

THE LEADING SEVENTH.

132. L7, being a dominant discord, naturally **resolves** upon the tonic chord. The seventh *falls* one degree; the fifth, being diminished, also (with one exception, see § 133, *a*) *falls* one degree; the leading-note *rises* to the tonic; while the third—the fifth of the generator—alone is *free*. When the third is below the seventh, care must be taken to avoid consecutive perfect fifths. The third in this case may either rise one degree, doubling the third in the tonic chord, or it may proceed to the dominant, doubling the fifth in the tonic chord. When placed above the seventh the third generally falls one degree.

These consecutive fifths are shown at *a*, between the treble and tenor; at *b* they are avoided by the third rising; and at *c* by the third falling to the dominant; at *d*, the third being above the seventh, the tonic chord appears with the root doubled.



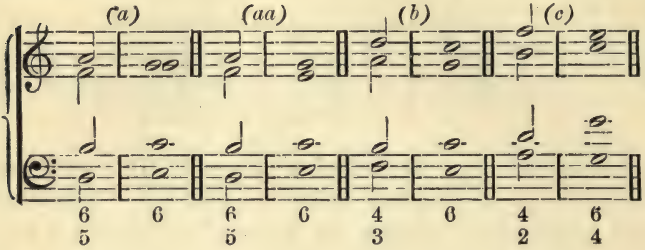
The seventh may be placed in any part, but should not appear below the leading-note unless it is *prepared*. Otherwise it is not necessary to prepare the seventh, though, if not prepared, it is preferable to approach this note from below, and especially is this the case if the movement should be disjunct.

133 L7 has three **inversions.**

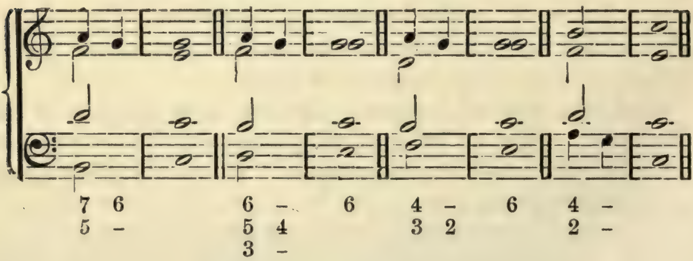
(*a*) The *first* inversion, $L7^1$, occurs on II, and the generator is a fifth below the bass-note, which in this case rises one degree to avoid the consecutive fifths. The chord of resolution is therefore I^1, and in order to avoid doubling the bass in this chord the third in $L7^1$ is allowed to rise one degree. This is the only case in which the fifth of the leading-note is allowed to rise in the resolutions of L7 and its inversions. The treatment of IV in this resolution may be compared with the treatment of IV in the exceptional resolution of $V7^2$, as explained in § 89. The fifth in this chord may of course, if preferred, fall one degree naturally as at *aa*.

(*b*) The second inversion, $L7^2$, the most popular of the inversions, occurs on IV, and the generator is a seventh below the bass-note, which falls one degree. The chord of resolution is therefore once more I^1.

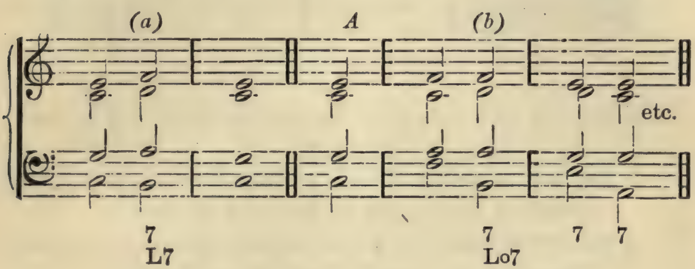
(*c*) The *third* inversion, $L7^3$, a chord not often employed, occurs on VI, and the generator is a ninth (not a second) below the bass-note, which falls one degree. The chord of resolution is therefore I². The bass-note in L7³ should invariably be prepared. I² in this case is usually treated as an arpeggio six-four, or possibly as a passing six-four, but rarely as a cadential six-four. Care must be taken in resolving L7³ to avoid consecutive perfect fourths between the bass and the part which takes II.

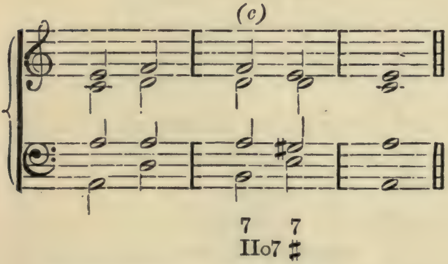


134. The seventh in L7 and its inversions, like the ninth in V9, may be resolved while the other notes of the chord remain *stationary*; the chord is then converted into V7 or one of its inversions, and is resolved accordingly; the third in L7 being no longer restricted in its progression. This form of resolution is especially desirable in the case of L7³ which is thus changed to V7 in root position, and so a somewhat objectionable six-four (I²) may be avoided.



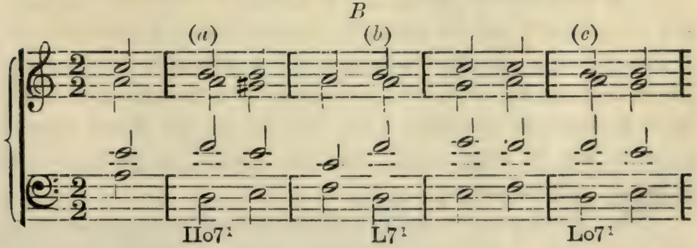
135. L7 (*a*) as a derivative of V9, must not be confused with Lo7 (*b*), as a secondary seventh, nor with IIo7 (*c*), the supertonic seventh, of the minor mode. These three chords which are identically the same in appearance may be readily distinguished by the chord upon which they severally resolve.

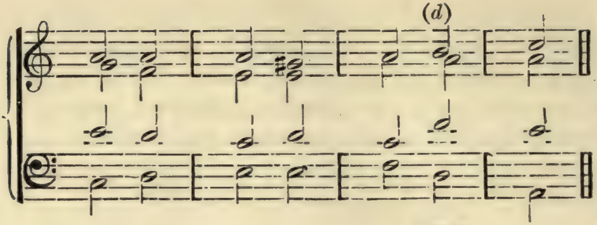




Furthermore, $L7^1$ must not be confused with IV–6, the chord of the Added sixth in the minor mode, which (see § 115) in appearance is identically the same as $IIo7^1$.

These chords are exemplified in the following passage.





a, the first inversion of the supertonic seventh in A minor; resolving on the dominant;

b, the first inversion of the leading seventh in C major; resolving on the first inversion of the tonic.

c, the first inversion of the secondary seventh on the leading-note in C; resolving on the mediant; and

d, the Added sixth in A minor, resolving on the tonic.

The melody of the above passage is necessarily somewhat monotonous, the purpose of the example being to introduce the four chords each in the same position.

The seventh in L7 and its inversions is often chromatically lowered, the chord then becomes a diminished seventh, and is resolved as such on the tonic major chord.

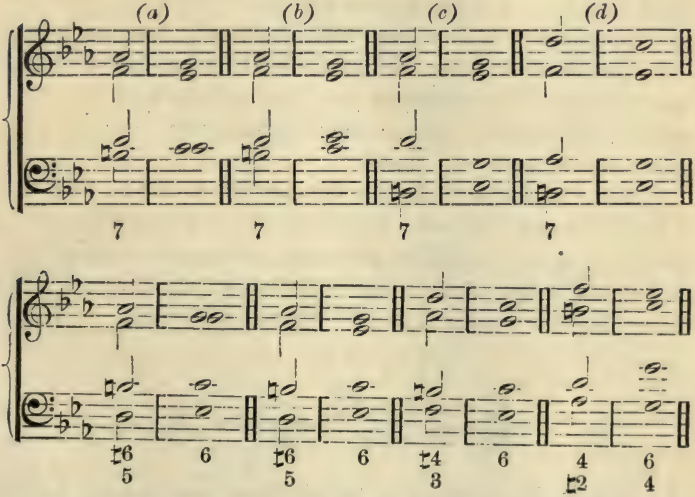
THE DIMINISHED SEVENTH.

136. L7o, also being a dominant discord, also naturally *resolves* upon the tonic chord; and whether in root position or inverted, this chord is resolved in practically the same manner as the leading seventh. The seventh in L7o, however, does not require preparation when it is placed below the leading-note.

The consecutive fifths, (see *a*) to which reference was made in § 132, should still be avoided, notwithstanding that the fifth of the supertonic in the minor mode is a diminished fifth; and the same may be said of the consecutive fourths which are liable to occur in resolving L7o^3, though as one of the fourths in this case is augmented, the progression is perhaps not altogether objectionable.

The effect of consecutive fifths, one of which is perfect and the other diminished, depends almost entirely upon the degree of the scale upon which 5o (the diminished fifth) occurs. When 5o occurs upon L, preceded or followed by 5+ on I, the effect is not *bad*, provided that none of the rules for the resolutions of discords has been broken, as has already been seen at b, § 89. When 5o occurs upon II of the minor mode and is followed by 5+ on I, the effect, generally speaking is bad, and especially is this the case if these consecutives occur between the *extreme* parts; and indeed the effect is almost equally bad when this particular fifth is preceded by 5+ on I, except alone in approaching L7o, when, presumably on the ground that 5+ is foreign to the construction of this chord, no bad effect can arise from consecutive fifths in such progressions.

The following examples, being transcriptions to the key of C minor of the examples given in §§ 132 and 133, illustrate the natural resolutions of L7o and its inversions.



The seventh in L7o, just as in L7, may be resolved while the other notes of the chord remain stationary, see example § 134. which may be transcribed to the minor mode also.

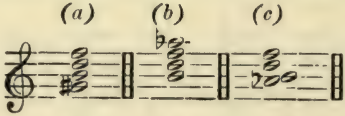
137. L7o differs from L7 and from other previously considered chords in one important particular, namely, that its *constituent notes* are **equidistant**; the interval between each successive third of the chord being a *minor* third. In other chords of the seventh the thirds vary, some being major and some minor. The following table illustrates the character of the thirds in the five most important chords of the seventh.

3–	3–	3+	3+	3–
3–	3+	3–	3–	3–
3+	3–	3–	3–	3–
V7	II7	IIo7	L7	L7o

These intervals should be read upwards.

Furthermore, the interval between –VI and L of the minor scale, being an augmented second, and consisting of three semitones, is, in point of size, equal to a minor third; L7o, therefore, when played in arpeggio, consists of a succession of intervals, each of which contains three semitones. It naturally follows then, if another L7o (in another key) is formed upon any sound in a given chord of L7o, that both chords will consist of identically the same sounds. The notation of the chords which thus arise will be in accordance with the signature of the key in which each occurs; one or more enharmonic changes being necessary for each new chord.

The chord at *a*, is L7o in the key of A minor, that at *b*, L7o in C minor; if now, the chord at *b* is taken in its third inversion, as at *c*, it will be seen that this chord, on the piano, is identically the same as the chord at *a*; the G sharp in the latter chord becoming A flat by enharmonic change.

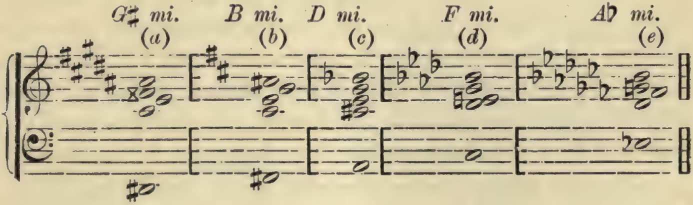


138. L7o, according to its notation, may belong to *four* entirely different minor keys; and since there are twelve, and, practically speaking, only twelve different minor keys, it follows that there are *three*, and practically speaking, *only* **three**

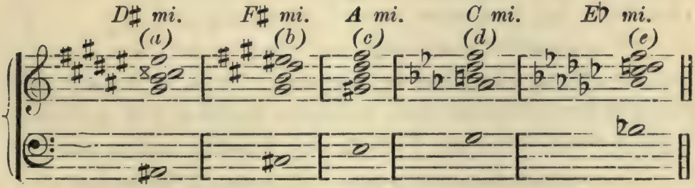
different chords of L7o possible in music.

The attendant minor keys of any given major key will furnish these three chords, and by enharmonic changes each of these chords may be converted into certain other minor keys, the tonics of which (like the notes of the chord) are a minor third apart. These three chords, with their enharmonic changes, are shown in the following examples, in which, for convenience, they are written in contracted form in the treble stave, the generator of each chord being given in the bass stave. Though apparently each chord here belongs to five different keys, yet in reality there are only four entirely different keys, for the chords at *a* and *e*, in each case, belong to keys which are *enharmonic equivalents*. The normal position of each chord is shown at *c*.

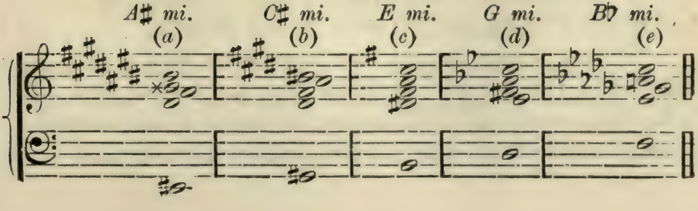
I



II



III



It will be seen from the above examples, and it is interesting to note, that both the tonics and the dominants of the associated keys constitute in themselves a chord of the diminished seventh. Thus the tonics in example II—D♯, F♯, A and C—form the chord at *c*, in example III; while the dominants in example II—C♯, E, G and B♭—form the chord at *c*, in example I.

139. The key to which any given L70 belongs may be found by determining which note of the chord is L, and L may be determined by means of the theory which is now about to be explained, the theory of **the sharpest note.**

Each degree of the major mode possesses a certain relative character of *acuteness* and *gravity*, L being the acutest and IV the gravest. This feature will readily be seen in the scales of G and F, respectively, in the former of which L is the only sharp note present, and in the latter IV the only flat note present. In the minor mode, L is the acutest but VI the gravest. L then being the acutest note in both modes, and being moreover the note upon which L70 is formed, this theory is invariably regarded from the sharp, rather than from the flat standpoint.

Double sharps are evidentally more acute than single; single sharps more acute than naturals; naturals more acute than flats; and flats more acute than double flats.

Of sharps, the last sharp, according to the major signature, has the acutest character in the key. Thus, in the key of D, C sharp is more acute then F sharp; in the key of A, G sharp is more acute than both F sharp and C sharp, and so on.

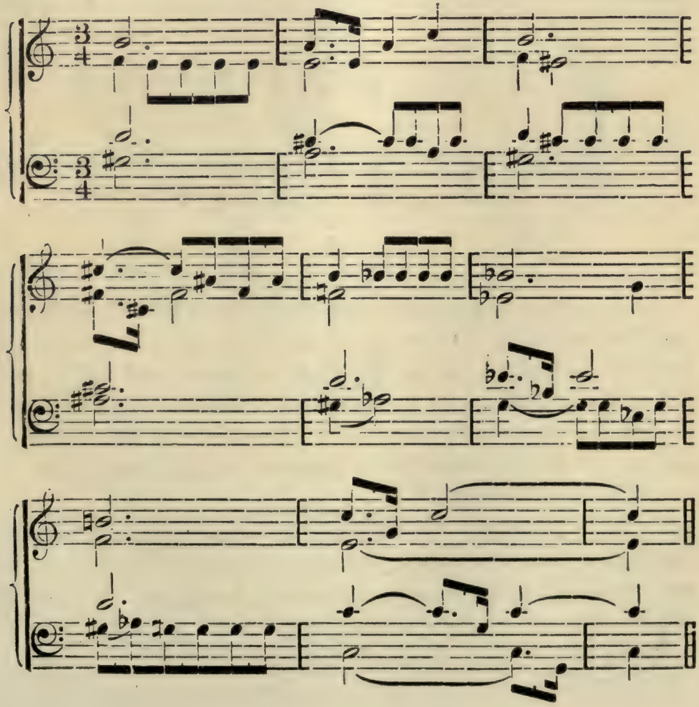
Of naturals, the most acute is B, being L in the key of C; the next most acute is E (a perfect fifth below); the next A, and so on, F being the gravest of all the naturals.

Of flats, it may be said that they play a very small part in this theory, for in only one major key, and in no minor at all, is L a flat, namely in C flat major; B flat is however the most acute of all the flats, E flat (a fifth below) the next, and so on.

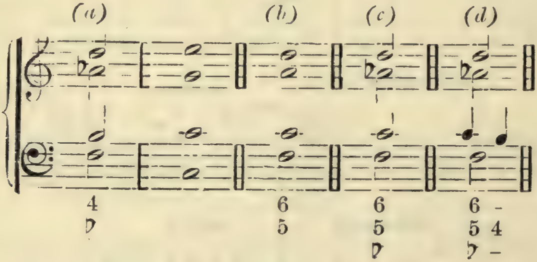
The value of this theory may be tested by applying it to the chords in the above examples, § 138. The student would do well to write all these chords, employing no key signature but inserting the necessary accidentals, and then indicate the sharpest note (i.e. L) in each case, from which the generator of the chord—always a major third below L—and the key in which the chord occurs, may readily be determined.

140. L7o is frequently employed in the *major* mode, when it may be regarded as L7 with the seventh chromatically lowered.

The following passage illustrates the various chromatic resolutions into major keys of the diminished seventh on G sharp, the seventh in each case resolving with a simple ornamental device, while the other notes of the chord remain stationary.

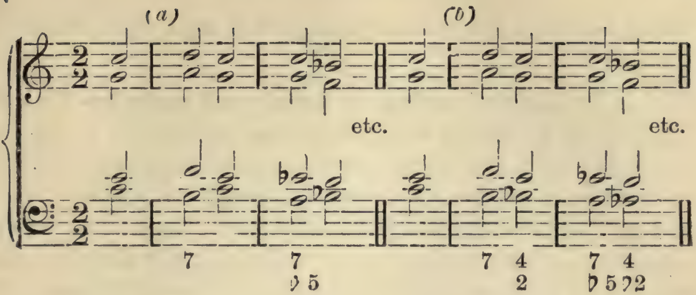


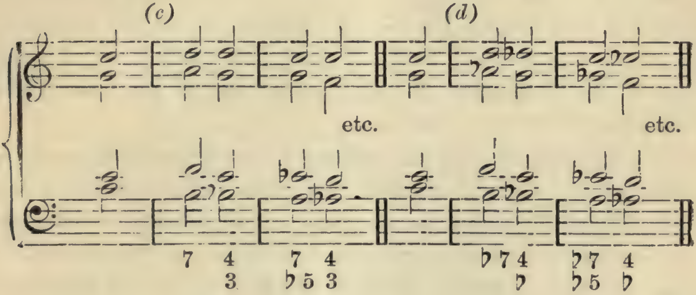
141. Although derived from V, L7 and L7o play practically no part whatever in cadences. Reference, however, may here be made to a chord having the appearance of L7o^{2}, which may be employed with good effect as at *a*, but the disjunct movement in the bass in this progression is altogether contrary to the rules which govern the resolution of L7o. This chord must be regarded as an ornamental form of the 'added sixth,' *b*, the third being chromatically lowered, *c*, and the fifth displaced by its lower auxiliary note, *d*. In the chord at *a*, the fifth is absolutely displaced. This analysis of this exceptional chord justifies the 'skip' in the bass, and avoids the necessity of applying to the progression the somewhat objectionable term—license.

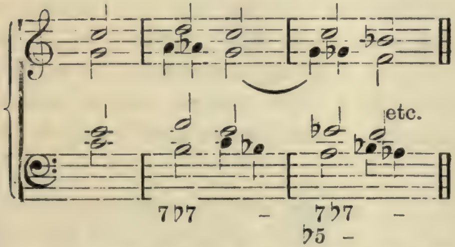


142. Many interesting variations of the *dominant* sequence may be formed by the use of L7 and L7o. A few of these are herewith appended; at *a*, the sequence is formed by L7 and I+, this might be varied by employing L7o and I+, or L7o and I−; at *b*, by L7 and V7^{3}; at *c*, by L7 only; at *d*, by L7o only; and at *e*, by L7 chromatically changing to L7o, then resolving to I+, followed by V7^{3}.

Other variations of a similar character will readily suggest themselves, but, it may here be said, the possible variations of the dominant sequence are absolutely inexhaustible, and this will be the more readily appreciated when suspensions and auxiliary notes together with the chromatic element in harmony are added to the chords which have already been considered.







143. The best **progressions** *to* L7 and L7o are from those major and minor triads which do not contain L; also from II7 and IIo7. The bass of these chords (in whatever position they occur) should, as a rule, be approached *conjunctly*; if approached disjunctly, the leap should be from the opposite direction to that in which the bass of the chord is about to move. L7 and L7o may also be preceded by V or V7, the

effect, however, can hardly be regarded as a harmonic progression.

In harmonizing **unfigured basses** and **melodies**, L7 and L7o may be frequently employed instead of V or V7, except at cadences, and provided, of course, that the progression admits of the correct resolution of these discords. No definite rules can well be formulated in this connection. Good taste, which every earnest student must strive to possess, will alone suggest when these fundamental discords may be effectively introduced. Suffice it to say that discretion must be exercised in the employment of these chords, for the too frequent use of one particular kind of discord will result in that very monotony of tone-color, the avoidance of which is the special purpose of the dissonant element in music.

With this chapter the subject of fundamental discords is concluded. Certain modern authorities (since about the year 1850) have advocated an extension of this subject so as to comprise chords of the eleventh and thirteenth—chords formed by the addition of further thirds to those of chords of the ninth; this theory of chord construction, however, which was altogether unknown to the greatest masters of music in the past, can by no means be claimed to meet all the requirements of the modern composer, or to account for all the progressions in modern compositions, and, therefore, it will not be considered in the present work.

The student may, at this stage, read the latter part of the Preface, pages vii to xii, and he should have but little difficulty in following the line of argument there adduced to confute this particular theory.

SUMMARY.

§ 131. The Leading (or Minor) and the Diminished sevenths on L.

L, the nominal or apparent root and V, the generator.

§ 132. The leading seventh.

The fifth and seventh both fall, and L rises; if the seventh is placed below L, it should be prepared.

§ 133. The inversions of L7.

In $L7^1$ the bass rises, in $L7^2$ and $L7^3$ it falls.

§ 134. The seventh treated as a suspension.

The chord is thus converted into V7.

§ 135. The ambiguous character of L7.

The chords, $L7^1$, $Lo7^1$, $IIo7^1$ and IV–6, are identically the same in notation, but differ in resolution.

§ 136. The diminished seventh.

L7o is treated practically the same as L7, but with no restriction as to the position of the seventh.

§ 137. L7o as compared with other chords of the seventh.

The constituent notes of L7o are equidistant.

§ 138. The enharmonic treatment L7o.

The three and, practically speaking only three, L7o chords in music.

§ 139. The theory of the sharpest note.

By which may be determined the key to which L7o and other dominant discords belong.

§ 140. The use of L7o in the major mode.

With illustrative example showing enharmonic changes.

§ 141. An exceptional treatment of L7o.

Occasionally employed as a variation of the plagal cadence.

§ 142. The use of L7 and L7o in sequences.

These chords are frequently employed in dominant (real) sequences.

§ 143. The best progressions to L7 and L7o.

From any triad which does not contain L; also from II7 and IIo7.

EXERCISES.

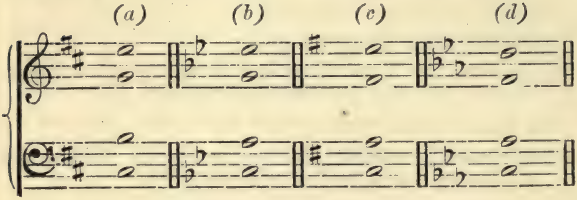
I.

1. Write and resolve L7 (the leading seventh) and its inversions in the keys of (a) G and (b) F.

2. Write and resolve L7c (the diminished seventh) and its inversions in the keys of (a) E minor and (b) D minor.

Introduce and resolve the following chords.

3.



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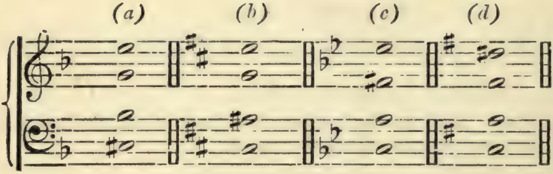
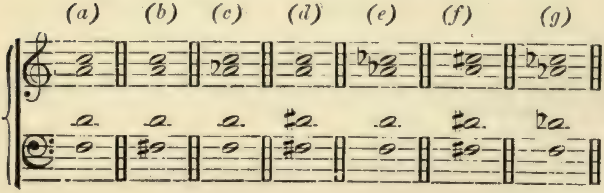
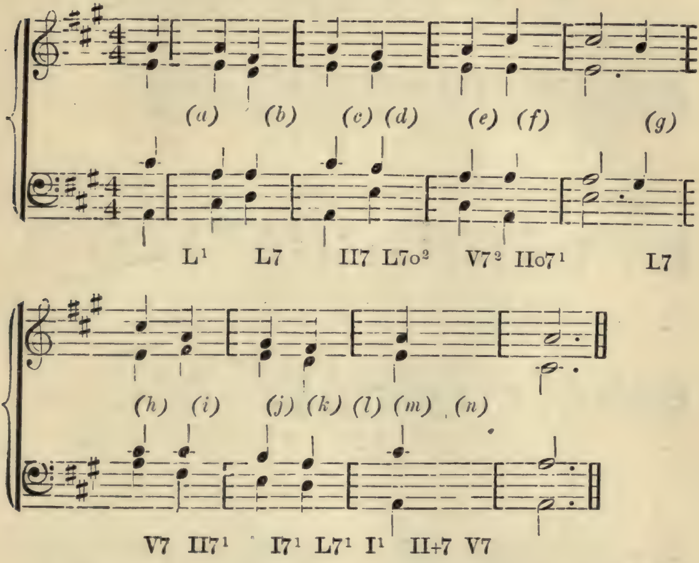


5. Write and resolve V7, II7, IIo7, L7 and L7o, employing the note E (third space in the bass) in each case.

6. Figure and symbolize the following chords.



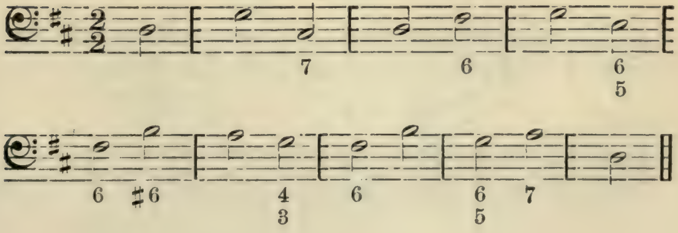
7. Complete the following passage by inserting the chords indicated by the symbols at the (vacant) beats marked *a*, *b*, *c*, etc., then figure the passage throughout.


(a) (b) (c) (d) (e) (f) (g)
L^1 L7 II7 L7o^2 V7^2 IIo7^1 L7
(h) (i) (j) (k) (l) (m) (n)
V7 II7^1 I7^1 L7^1 I^1 II+7 V7

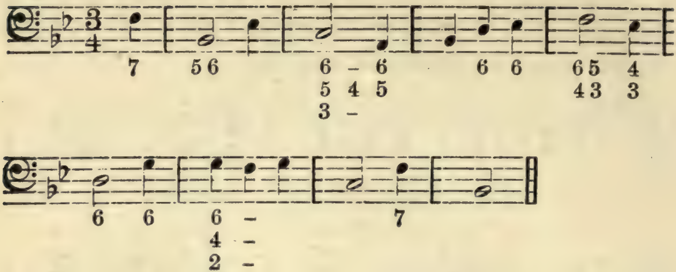
8. Write a variation of the dominant sequence, commencing in the key of E flat, employing L7o^2 and I+^{1} alternatively, and repeating the model at least three times.

Add treble, alto and tenor parts to the following basses.

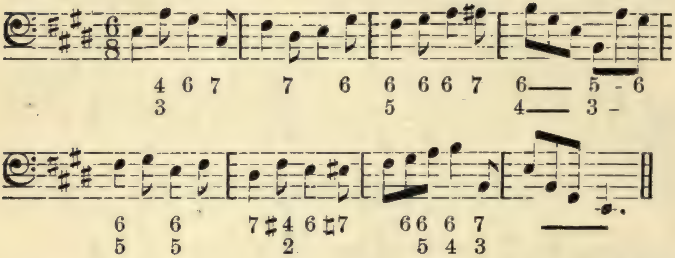
9.



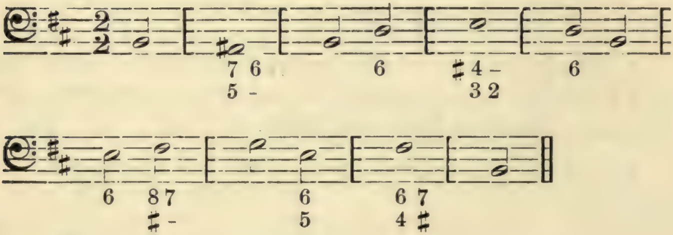
10.


7 56 6 – 6 6 6 65 4
5 4 5 43 3
3 –
6 6 6 – 7
4 –
2 –

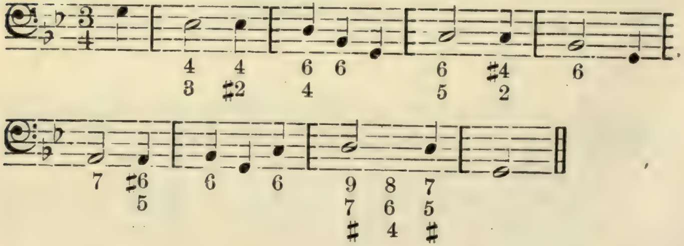
11.


4 6 7 7 6 6 6 6 7 6 5 - 6
3 5 4 3 -
6 6 7 ♯4 6 ♮7 66 6 7
5 5 2 5 4 3

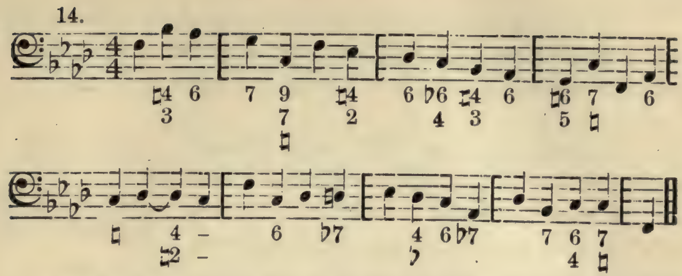
12.


7 6 6 ♯4 – 6
5 - 3 2
6 87 6 6 7
♯ - 5 4 ♯

13.

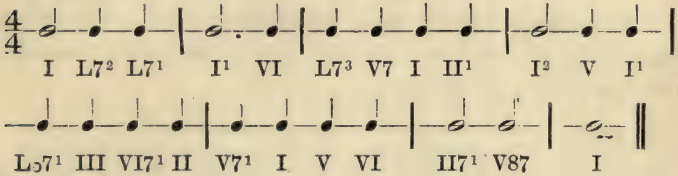

4 4 6 6 6 ♯4 6
3 ♯2 4 5 2
7 ♯6 6 6 9 8 7
5 7 6 5
♯ 4 ♯

14.

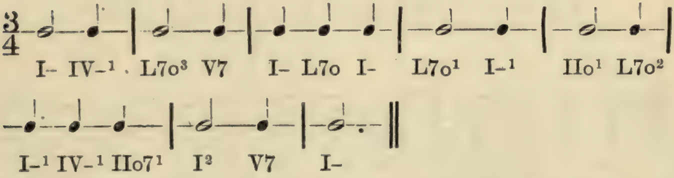


Clothe the following blank rhythms with harmony, employing the chords indicated by the symbols.

15. In the key of A flat.

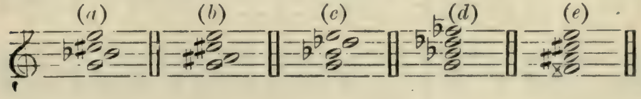

I L7² L7¹ I¹ VI L7³ V7 I II¹ I² V I¹
Lo7¹ III VI7¹ II V7¹ I V VI II7¹ V87 I

16. In the key of C sharp minor

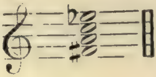


17. Write L7¹ in the key of F, and show that it can be treated as four entirely different chords.

18. The following chords, if played on the piano, will all have the same effect. How do you account for this fact? Name the key and give the generator of each chord.



19. Define the term enharmonic; and show that the keys with three sharps and three flats, both major and minor, may be severally connected by the enharmonic treatment of L7o.

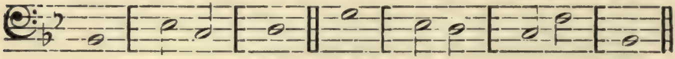


20. Show that this chord may be converted into V7 in four different keys, if each note in turn is lowered a semitone (diatonic or chromatic as the case may be), and if certain enharmonic changes (where necessary) are introduced.

II.

Harmonize the following unfigured basses and melodies, introducing L7 (and occasionally L7o) in the major exercises, and L7o (alone) in the minor.

21.



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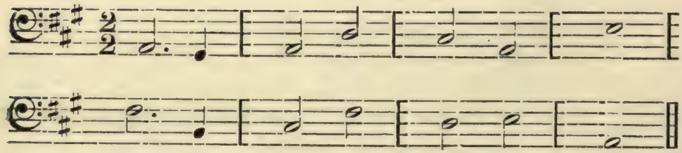

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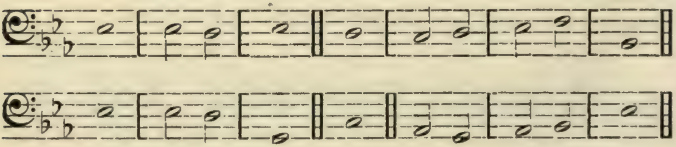

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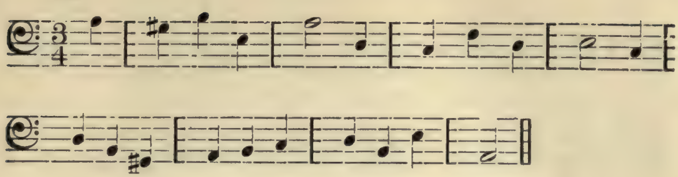

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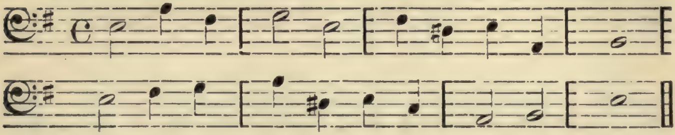

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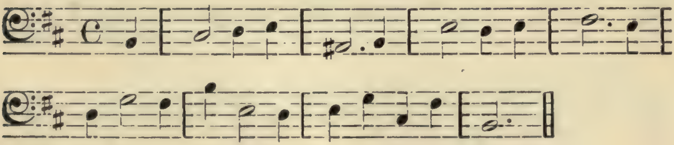

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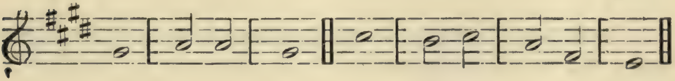

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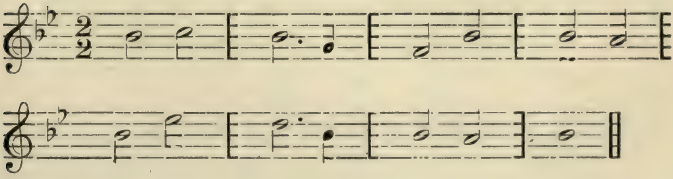

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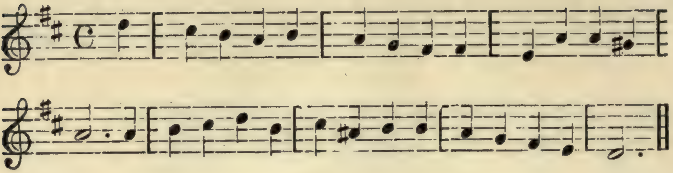

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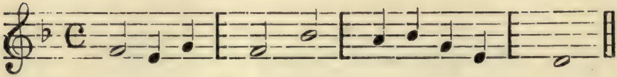

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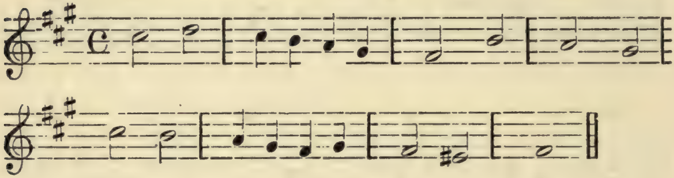

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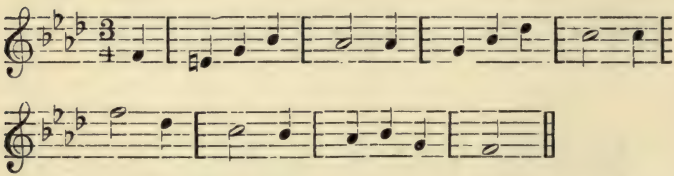
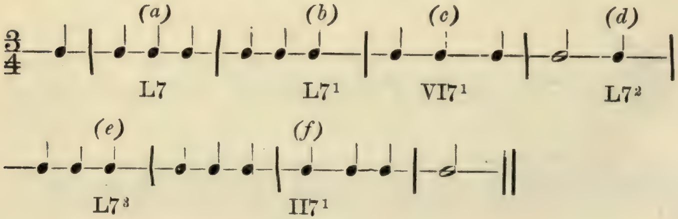
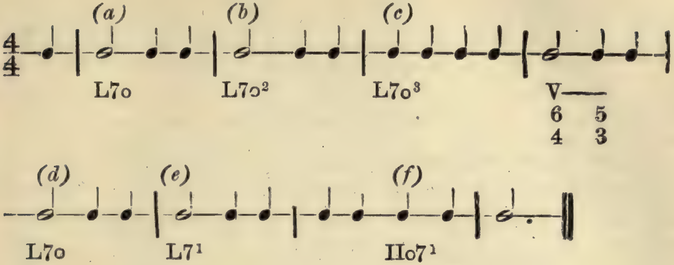


Clothe the following blank rhythms with harmony, introducing the chords indicated by the symbols.

33. In the key of E.



34. In the key of F minor.



35. Compose a double chant (or hymn-tune) introducing *with good effect* at least one enharmonic change of L7o.

36. Write a passage of harmony in the key of A minor, introducing examples of the fundamental discords which have so far been considered; and making at least one modulation to an attendant key.

CHAPTER XV.

SIMPLE SUSPENSIONS.

144. A suspension is the name given to a discord formed by the **holding over** or *prolongation* of a note from one chord to which it belongs into another to which it does not belong; this—the dissonant note—is then resolved by rising or falling (usually the latter) *one degree* to the note to which it would have proceeded directly had it not been held over.

It has already been stated (§ 122) that the notes immediately above and below any given note are called, respectively, its upper and lower auxiliary notes, and that a suspension is the temporary displacement of a note by one of these auxiliary notes. If the upper auxiliary note is employed it is called a *falling* suspension, if the lower, a *rising* suspension.* The auxiliary note must be heard in the same part in the preceding chord, that is to say, the suspension must be *prepared*, and it is customary, though not necessary, for the note of preparation to be tied to the auxiliary note, so that a suspension frequently takes the form of a syncopation. The auxiliary or displacing note is called the *suspending* note; the note which is displaced and about which (until it is heard) there is, as it were, a feeling of suspense, is called the *suspended* note; while the suspending and the suspended notes taken together, constitute the suspension.

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* Rising suspensions have been called, by some authors, 'Retardations,' but to the use of this term in this connection there are some objections; it is not only unnecessary to employ an entirely different name for discords, which to all intents and purposes are practically the same as suspensions, but in the present instance it even leads to confusion, for the term 'retardations' is now employed by many authorities to designate certain discords of another character, which, sometimes called 'driving' or 'lagging' notes, will be duly considered in chapter XVIII.

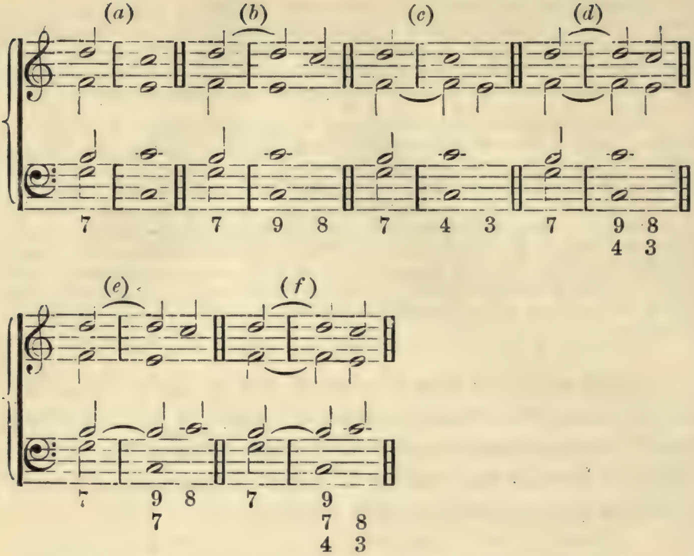
As falling suspensions are much more frequently used than rising suspensions, the term 'falling' is generally omitted, being understood, just as the term 'major' is generally omitted, being understood, when referring to major scales and major common chords. The term 'rising,' however, must not be omitted in the case of a rising suspension.

Although suspensions were in use, as a matter of fact, more than a century prior to the establishment of fundamental discords, nevertheless it is customary to treat of these chords in the order adopted in the present work. A reason for so doing may be seen in the fact that V7 is more frequently employed at the present day, and at the same time its treatment is more readily understood by the average student, than discords formed by suspensions. The historical influence of these chords is still felt in strict counterpoint, in which suspensions and, moreover, certain forms of auxiliary notes are freely employed, while the use of V7 and indeed of all forms of fundamental discords is absolutely forbidden.

When only one note in a chord is displaced it is called a single suspension, when two or three notes are displaced they are called respectively double and triple suspensions. Quadruple suspensions are possible in five-part harmony, and even quintuple suspensions in six-part harmony.

145. Before this somewhat complicated subject is considered in detail, a few of the most frequently employed suspensions will be exemplified. These occur in connection with the principal resolution of V7, as shown at *a*. At *b*, this progression is varied by the employment of a suspension in the treble; at *c*, by the employment of a suspension in the alto; the single suspensions at *b* and *c*, are combined at *d*, forming a double suspension; another form of double suspension is shown at *e*, where a rising suspension is introduced in the tenor; while at *f*, the three upper parts are all suspended, forming a triple suspension.

The D in the treble in V7 at *b*, is the note of preparation, it is tied to D (the suspending note) which duly falls to C (the suspended note), the D and C thus forming the suspension The other suspensions in the above examples, it will be seen, are similarly treated.



The **figures** employed to represent suspensions are placed horizontally. In reading these figures it is necessary to insert the word 'to' between them; thus, the discord at *c*, is said to be a four-to-three suspension; and that at *e*, a nine-four-to-eight-three suspension. By this plan the difference between figures placed perpendicularly and figures placed horizontally under a bass-note is clearly expressed.

146. The **symbols** employed for suspensions are formed by placing the figure which represents the suspended note under the Roman numeral indicating the root of the chord, this figure being preceded by a small dash pointing upward or downward, according to the character of the suspension.

When the suspension occurs in the bass, the dash is placed before the Roman numeral.

The names of the suspensions in the above example (§ 145) together with their symbols are as follows:—

(*b*) I The tonic chord with the octave suspended.
'8

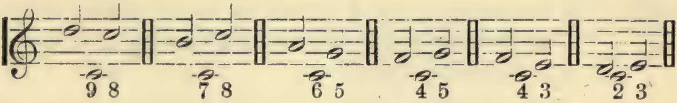
(*c*) I The tonic chord with the third suspended.
'3

(*d*)I The tonic chord with the octave and third suspended.
8
'3

(*e*) I The tonic chord with the octave doubly suspended.
¦8

(*f*) I The tonic chord with the octave doubly suspended and
¦8 the third suspended.
'3

147. Since a common chord contains three different notes, to each of which two auxiliary notes are attached, there are theoretically possible as many as six single suspensions; these as they occur in the chord of C (in root position), are outlined in the following example.



Of the above, the 98 and 43 are by far the most important; the 78 is only employed when the auxiliary note moves a semitone; the 65 usually occurs in the treble only; the 23 also usually occurs in the treble only, but comparatively speaking it is rarely used; the 45 is very rarely used as a single suspension, the figure 4 (the only figure indicative of a suspending note which, it will be seen, occurs twice) almost invariably suggesting a falling suspension.

These suspensions, with special reference to the 98 and 43, will now be considered as they occur in connection with the common chord and its inversions; in the chapter following they will be considered in combination with one another, and in connection with fundamental discords, reference also will be made to certain exceptional and ornamental resolutions, etc.

The subject of suspensions, it may be said, has never been treated exhaustively, and probably never will be so treated. The student must endeavour to grasp the general principles upon which these discords are introduced, and having accomplished this, must rest satisfied, for the real object of author and teacher alike may then be said to have been attained.

148. The following **rules** regarding the treatment of suspensions should be committed to memory:

I. A progression which is incorrect without suspensions, is equally incorrect if suspensions are introduced.

II. Suspensions must be prepared, that is to say, the suspending note must be heard in the same part in the preceding chord.

III. The note of preparation, when tied over, should be of equal value with, or of greater value than, the suspending note; when not tied over, it may be of lesser value.

IV. The suspending note should, as a rule occur on the accented part of the measure; in slow tempo, however, suspensions may often be introduced upon any beat.

V. The suspended note must not be heard in another part simultaneously with the suspending note, except under the following conditions:

(*a*) If the octave of the root is suspended, the octave may also be heard a ninth (or, in the case of a rising suspension, a seventh) or more below the suspending note, but not a second below, and in no case above.*

(*b*) If the root is suspended in the bass, the octave may be heard in any part above, if approached conjunctly and by contrary motion.

(*c*) Occasionally in the first inversion of the common chord, and frequently in the second, the octave of the bass is suspended, in these and in all cases in which the figure 9 occurs, the note thus represented must be placed a ninth or more, and never a second, above the bass.

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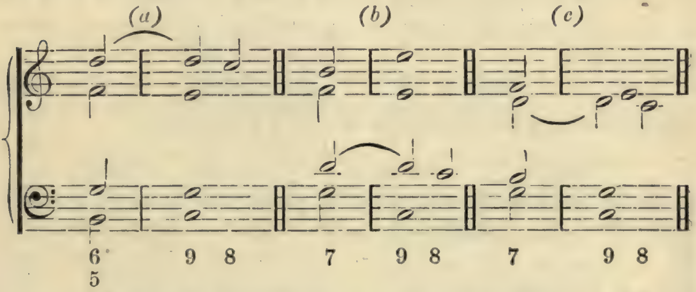
* One modern authority, and one alone, it is believed, allows the octave of the root to be heard above the suspension, provided it is approached conjunctly and by contrary motion; this, however, is a questionable license in any case, and the student is advised not to take advantage of it, especially at examinations.

149 The complete figuring for **the 98 suspension** is $\begin{matrix}9&8\\5&-\\3&-\end{matrix}$; it is, however, often necessary to omit the fifth, in which case the third or the octave must be doubled.

The short dashes used in connection with the figures in suspensions are lines of continuation, and must not be confused with the sign employed for the term minor, which in fact is never used in figuring chords, but only in symbolizing them.

The 98 suspension $\left(\begin{matrix}\text{I}\\ {}^{9}8\end{matrix}\right)$. has already been illustrated at *b*, § 145, where the fifth in I was omitted; in order to include the fifth it would be necessary to take B, (L, in the tenor) down to G. If V7¹ is employed, instead of V7, I will naturally be complete, as at *a*, in the following example; at *b*, the suspension is placed in the tenor, and care must be taken that the root is not heard *above* the suspending note, hence it is necessary to take the treble up to E, doubling the third at I; at *c*, the suspension is placed in the alto, and here it is necessary to take B (in the tenor) down to G, for C, a *second* below the suspending note, would be incorrect.



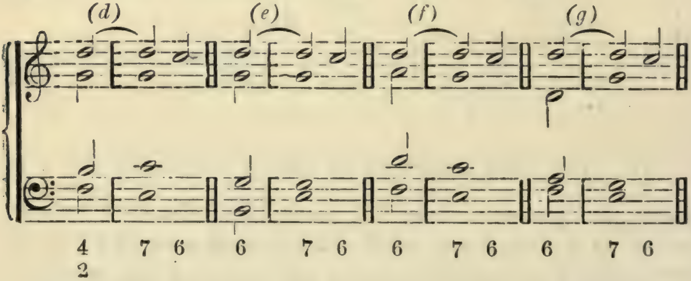
150. The **first inversion** of the 98 suspension $\left(\begin{matrix}\text{I}^{1}\\ {}^{9}8\end{matrix}\right)$ is figured 76, the complete figuring being $\begin{matrix}7&6\\3&-\end{matrix}$. The best note to double, as a rule, is the third, though sometimes the bass is doubled, and occasionally (see *d*) the root. In this inversion it is generally best to place the suspension in the treble.

It is important to distinguish between the significance of the figure 7 in this chord and in chords of the seventh. When

7 is immediately followed by 6, as will be seen from the following examples, the fifth of the bass is altogether foreign to the chord; while in chords of the seventh the fifth is an essential note, although, as a matter of fact, it is frequently omitted in four-part harmony.

The 76 suspension occurs in perhaps its most natural form in resolving $V7^3$, as at *d*; there is no objection in this case, it may be said, to the C in the tenor, as it is not only the root of the chord, but is also a ninth below the suspending note; and, moreover, is approached conjunctly from the leading-note; some authorities, however, object to the presence of this C, and prefer that the tenor should fall to G (doubling the third, or rise to E (doubling the bass), in both cases involving disjunct movement from B—the leading-note; others exemplify this suspension as at *e*, with the bass moving disjunctly. Care must be taken to avoid progressions such as that at *f*, where besides the consecutive fifths between the alto and tenor, there are also consecutive octaves *in effect* between the treble and tenor; these may be corrected by taking the tenor either down to G or up to E for the second chord, or by writing the alto and tenor parts as at *g*.

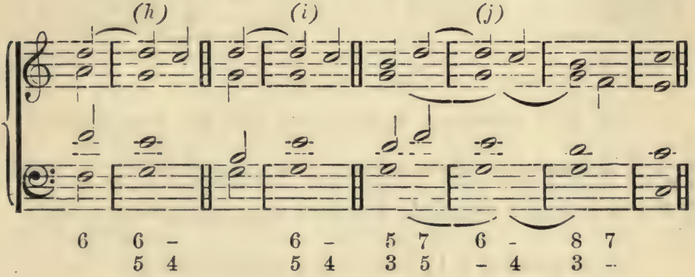
The 76 suspension on II, when resolving on I or I^1, is regarded as the incomplete form of $V7^2$, (see § 90).



151. The **second inversion** of the 98 suspension $\left(\begin{smallmatrix}I^2\\98\end{smallmatrix}\right)$ is figured $\begin{smallmatrix}6 & -\\5 & 4\end{smallmatrix}$. As this is really a six-four chord, it is customary

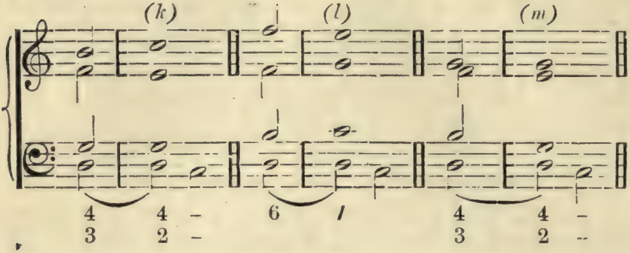
to double the bass-note, while the suspension itself is again generally placed in the treble.

The most popular use of this chord is in connection with the cadential six-four, as at *h*, the chord of introduction in which case must not be either V or V7, or indeed any chord which contains L. When preceded by V, the suspension may be treated as at *i* or *j*, the chord in each of these cases being a pedal six-four; the concluding measures of the example at *j* show the natural continuation of the progressions at *h* and *i*.



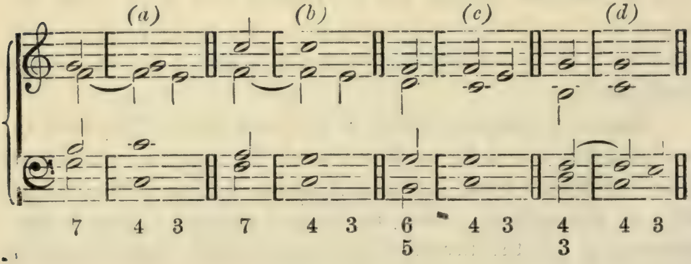
152. The **third inversion** of the 98 suspension occurs when the root of the chord is suspended in the bass. The figuring usually employed for this suspension is $\begin{smallmatrix}4-\\2-\end{smallmatrix}$, although the complete figuring $\begin{smallmatrix}7-\\4-\\2-\end{smallmatrix}$ is occasionally employed, especially when the presence of the octave of the root is desired. Another form of figuring for (single) suspensions in the bass, adopted by some authorities, though not in general use, is to place an *oblique dash* under the suspending note, the dash signifying that this note is to be harmonized with the notes of the *succeeding* chord, see *l*.

The most natural position of this suspension ('I) occurs in resolving $V7^2$, as at *k*; or, if preferred, $V7^2$ may be employed in its incomplete form (L^1) as at *l*, where the use of the oblique dash is exemplified; some authorities (again) object to the presence of C—the inverted root—and prefer that B should fall to G as at *m*; if, however, B were placed in the treble it would have to rise to E, for falling to G would result in somewhat objectionable hidden consecutive fifths between the extreme parts.



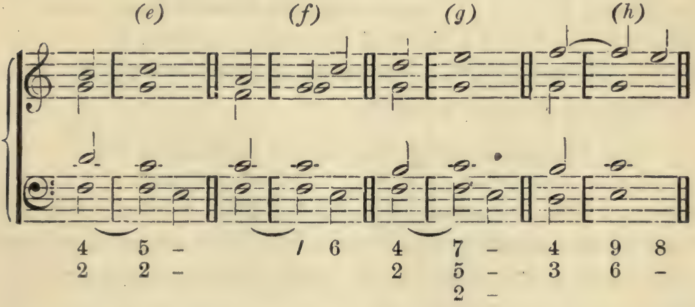
153. The complete figuring for **the 43 suspension** is $\begin{smallmatrix}8 & - \\ 5 & - \\ 4 & 3\end{smallmatrix}$; it is, however, often necessary to omit the fifth, in which case the octave is doubled; the third must never be doubled.

This suspension $\left(\begin{smallmatrix}\mathrm{I} \\ 43\end{smallmatrix}\right)$ has already been illustrated in connection with the perfect cadence, at *c*, § 145, where the fifth in I was omitted; to include the fifth in I, the fifth in V7 may be omitted at at *a*, in the following example. The 43 suspension is also frequently employed in connection with the plagal cadence as at *b*. The suspension itself may be freely employed in any part; at *c*, it occurs in the treble, and at *d*, in the tenor, with $V7^1$ and $V7^2$, respectively, as the chords of preparation.



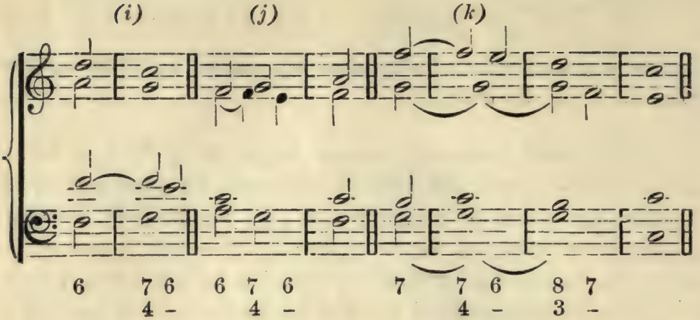
154. The **first inversion** of the 43 suspension $('I^1)$ is figured $\begin{smallmatrix}5 & -\\ 2 & -\end{smallmatrix}$, and either of the notes represented by these figures may, as a rule, be doubled.

This chord frequently occurs in resolving $V7^3$, as at *e*; instead of the figures the oblique dash may be employed as at *f*, where the chord of preparation is IV; the third of the root is sometimes added to the chord as at *g*, the effect, however, is somewhat harsh, and unless it is justified by the context, it is preferable to double either the fifth or the second of the bass; at *h*, is shown the octave of the bass in I^1 suspended; this chord $\left(\begin{smallmatrix}I^1\\ {}'3\end{smallmatrix}\right)$ though also somewhat harsh, is less so than that at *g*.



155. The **second inversion** of the 43 suspension is figured $\begin{smallmatrix}7 & 6\\ 4 & -\end{smallmatrix}$. As this is really a six-four chord it is customary to double the bass-note; while the suspension itself may again occur in any part.

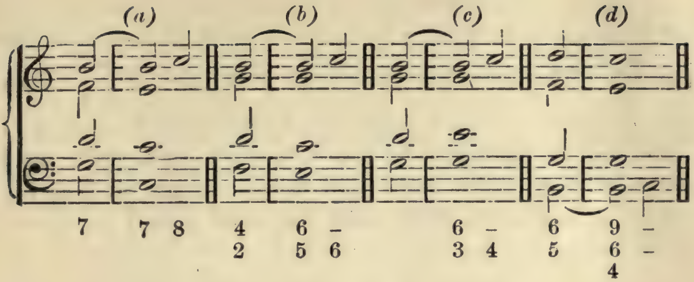
This chord $\left(\begin{smallmatrix}I^2\\ {}'3\end{smallmatrix}\right)$ is exemplified at *i*, in connection with a *cadential* six-four; at *j*, with a *passing* six-four; and at *k*, a *pedal* six-four. In the passing six-four, *j*, it will be seen that the suspension, for the first time in these examples, occurs on an unaccented beat.



156. The **78 suspension**, the most important of the rising suspensions, naturally occurs on I; it may also occur on IV of the major mode, and VI of the minor. In all cases the seventh must rise a *semitone*, and not a tone; the seventh must, therefore, invariably be a *major* interval, the minor seventh, as has been seen in connection with fundamental discords, having a tendency to resolve by *falling* one degree.

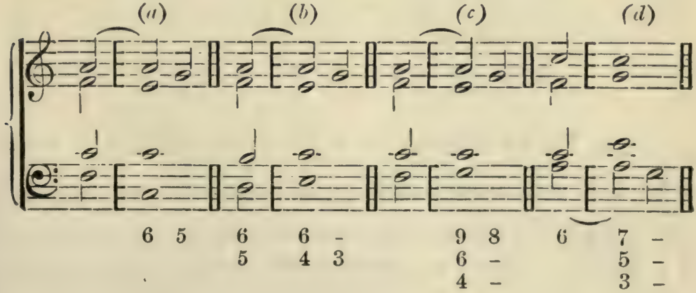
The complete figuring for the 7 8 suspension is $\begin{smallmatrix}7 & 8\\ 5 & -\\ 3 & -\end{smallmatrix}$; it is however, often necessary to omit the fifth, in which case the third or the octave must be doubled. The suspension itself may occur in any part, but it most frequently occurs in the treble.

The root position of this chord $\left(\begin{smallmatrix}\mathrm{I}\\ 8\end{smallmatrix}\right)$ is shown at *a*; the first inversion at *b*; the second at *c*; and with the suspension in the bass at *d*. In the first inversion, *b*, some authorities object to the presence of the root (C), here in the tenor, and would prefer either G (doubling the third) or E (doubling the bass), but as in the case of the 76 suspension (§ 150, *d*,) there is no valid objection to the presence of this note. The progression at *c*, is of rare occurrence; that at *d*, may be varied by taking the treble either up to E or down to G, if the presence of the root (C) is not desired.



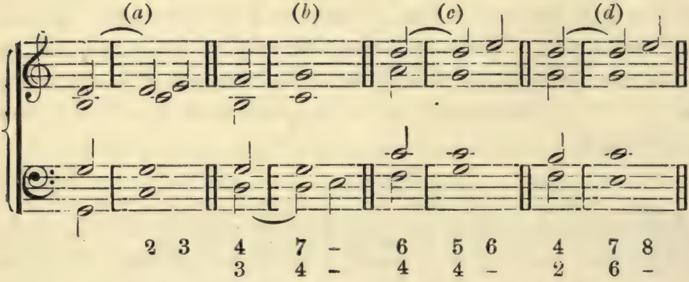
157. The **65 suspension**, the complete figuring for which is $\begin{smallmatrix}8 & -\\ 6 & 5\\ 3 & -\end{smallmatrix}$, usually occurs on I and V only. It is customary to double the bass in this chord, while the suspension itself is almost invariably confined to the treble part.

The root position of this chord $\left(\begin{smallmatrix}\mathrm{I}\\ {}^{\prime}5\end{smallmatrix}\right)$ is shown at *a*, the chord of preparation being IV; in place of IV, V9 may also be employed with good effect; the first inversion is shown at *b*, the chord of preparation being L7^{1}, it is necessary in this case to let the bass rise one degree, in order to avoid the effect of consecutive fifths; the second inversion with the suspension in an upper part is shown at *c*, and with the suspension in the bass, at *d*; the progression at *d*, it may be said, is of very rare occurrence.



158. The **23 suspension** is, comparatively speaking, rarely employed, and more particularly in any form other than in root position. The complete figuring for this chord is $\begin{smallmatrix}8 & - \\ 5 & - \\ 2 & 3\end{smallmatrix}$. Care must be taken not to confuse the significance of the figure 2 with that of the figure 9; the 9 naturally falls while the 2 naturally rises. This suspension usually occurs on I and V only, the suspension itself being employed almost exclusively in the treble.

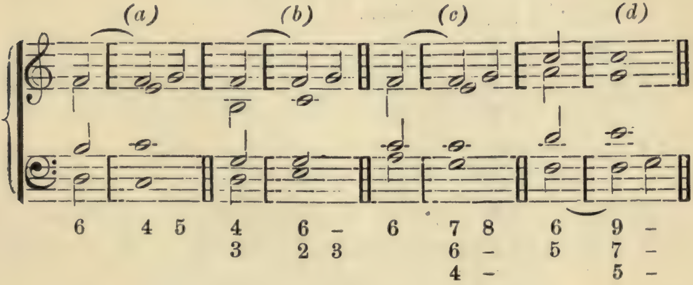
The root position of this chord $\left(\begin{smallmatrix}\mathrm{I} \\ 3\end{smallmatrix}\right)$ is shown at *a*, the chord of preparation being V; V7 in this case would not be practicable, as it would be incorrect for the third (the note upon which the seventh resolves) to be present in one part while it was suspended in another. At *b*, the first inversion of this chord is shown, and at *c*, the second inversion, the chords of preparation, $\mathrm{V}7^2$ and $\mathrm{II}7^1$ respectively, being perhaps the most effective chords available for this purpose. At *d*, is shown the octave of the bass in I^1 suspended by the note below; this chord, however, being somewhat harsh, is rarely employed.



159. The **45 suspension**, the complete figuring for which is $\begin{smallmatrix}8 & - \\ 4 & 5 \\ 3 & -\end{smallmatrix}$, is of very rare occurrence on account of its peculiar harshness. This discord, nevertheless, must be duly considered, as it plays a certain part in connection with combined suspensions,

and becomes even still more important when the chromatic element is introduced into harmony. To avoid unnecessary and extreme harshness, when this chord is employed, the suspension itself should be placed in the treble, and the other parts, especially the inner parts, should move as smoothly as possible.

The root position of this chord $\binom{\text{I}}{\downarrow 5}$ is shown at *a*, the chord of preparation, L^1, admitting of conjunct movement in all parts. At *b*, the first inversion of this chord is shown; at *c*, the second inversion; and at *d*, the suspension occurs in the bass; and although there is no disjunct movement in any of these progressions, yet, in spite of this, the effect of the discord is such that the progression is barely tolerable.



160 The suspensions which have so far been considered have all been illustrated in the key of C major, but the examples may in every case be transcribed into the key of C minor, for the possible suspensions in connection with the tonic chord are equally available in both modes. Many of the above suspensions may also be employed in connection with other chords; in the minor mode, however, suspensions such as the 43 on IV, and the 98 on VI, must be avoided on account of the augmented second which exists between the sixth and seventh degrees of of this mode.

SUMMARY.

§ 144. A suspension defined.

A form of discord arising from the temporary displacement of a consonant note.

§ 145. Suspensions exemplified.

The note of preparation, the suspending note and the suspended note.

§ 146. Symbols.

The marks, ' and ¡, indicate respectively falling and rising suspensions.

§ 147. The six single suspensions.

The 9 8 and 4 3 are the most important.

§ 148. Rules for the treatment of suspensions.

These should be committed to memory.

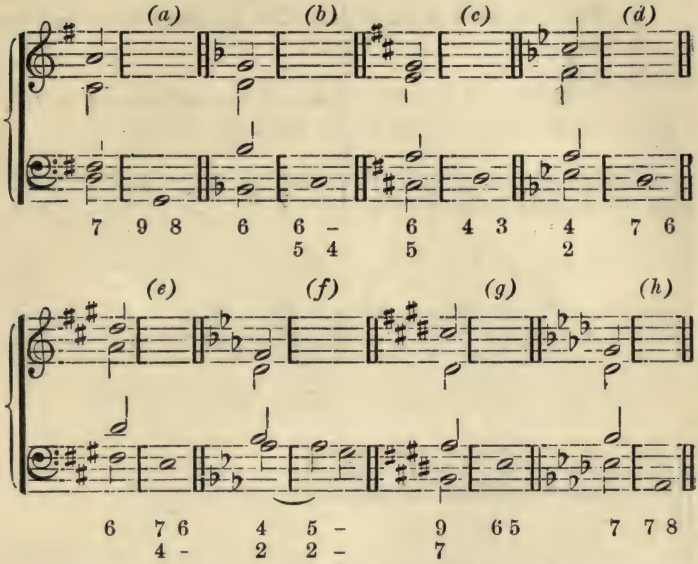
§ 149. The 9 8 suspension.
§ 150. " 7 6 "
§ 151. " $\begin{smallmatrix}6 & - \\ 5 & 4\end{smallmatrix}$ "
§ 152. " $\begin{smallmatrix}4 & - \\ 2 & -\end{smallmatrix}$ "
§ 153. " 4 3 "
§ 154. " $\begin{smallmatrix}5 & - \\ 2 & -\end{smallmatrix}$ "
§ 155. " $\begin{smallmatrix}7 & 6 \\ 4 & -\end{smallmatrix}$ "
§ 156. " 7 8 "
§ 157. " 6 5 "
§ 158. " 2 3 "
§ 159. " 4 5 "

§ 160. Suspensions in the minor mode.

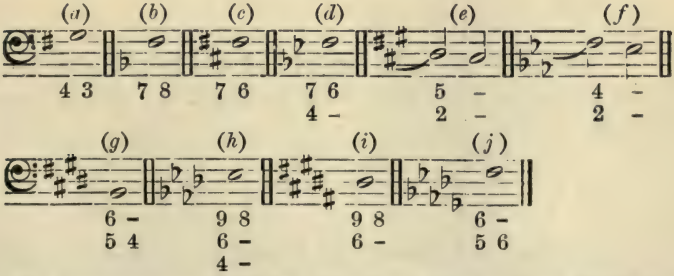
These are practically the same as the suspensions in the major mode, except that it is necessary to avoid the interval of the augmented second (VI to L) between the suspending and the suspended notes.

EXERCISES.

1. Complete the following progressions.



2. Write a chord of preparation, and harmonize the following suspensions. In each case give the symbol.

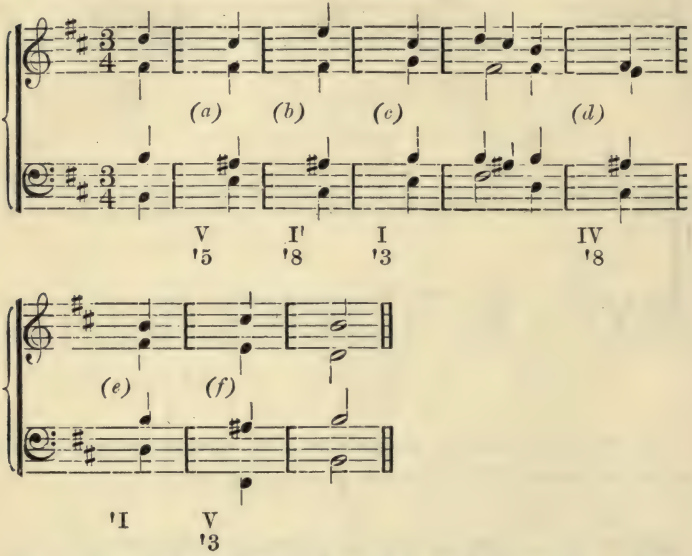


By transposing each of the above bass-notes a minor third lower and at the same time retaining the same key signature, these suspensions may be worked in the relative minor keys. The leading-note at *b* and at *j* will each require an accidental.

3. Write, in the key of A, the 98 suspension and its inversions.

4. Write, in the key of E flat, the 43 suspension and its inversions.

5. Complete the following passage by introducing at *a*, *b*, *c*, etc., the chords indicated by the symbols.



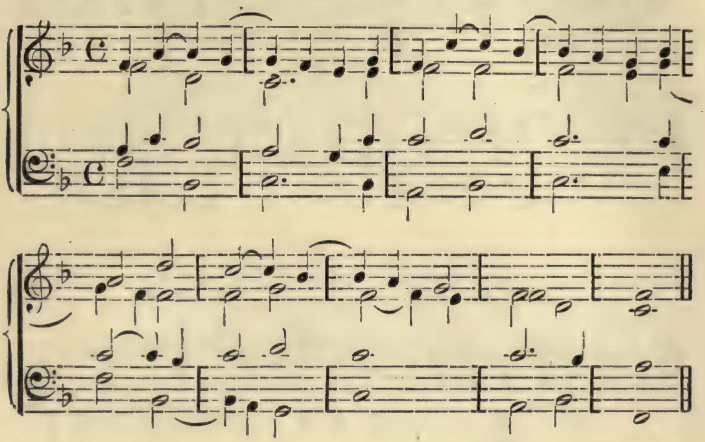
6. Exemplify (a) in the key of A flat and (b) in the key of C sharp minor, the suspensions indicated by the following symbols.

(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)
IV ;	II^1 ;	I^2 ;	ˈV^1 ;	I^1 ;	VI.
ˈ8	ˈ8	ˈ3		ˌ8	ˈ5

7. Prepare and resolve the following suspensions, (a) in the key of E, and (b) in the key of F minor.

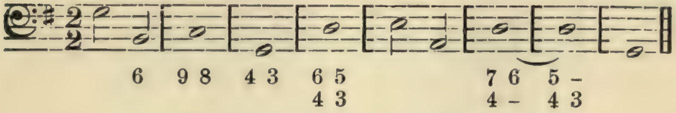
(*a*)	(*b*)	(*c*)	(*d*)	(*e*)		(*f*)
7 6;	5 – ;	6 – ;	7 6;	4 – ;	and	9 8.
	2 – ;	5 4	4 –	2 –		6 –

8. Figure the bass of the following passage, and symbolize the chords.

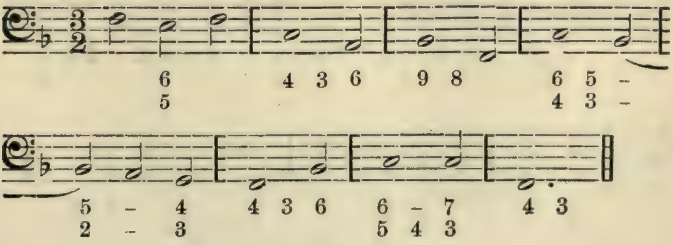


Add treble, alto and tenor parts to the following basses.

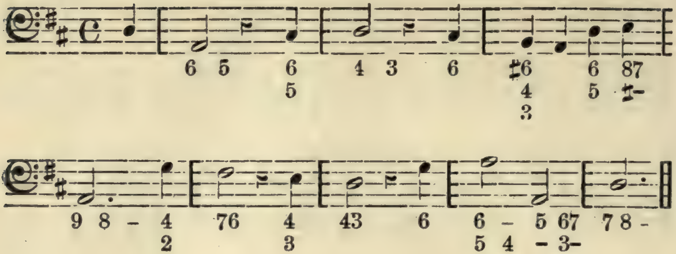
9.



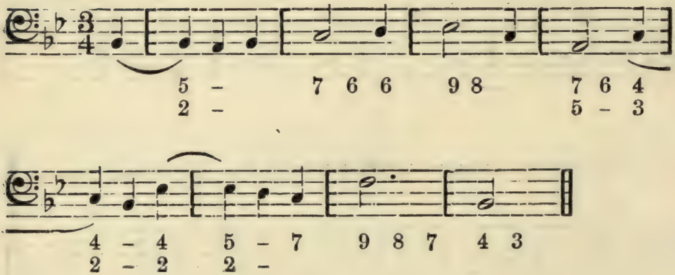
10.



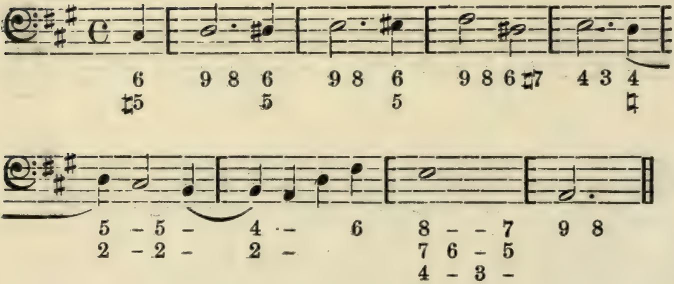
11.


6 5 6 4 3 6 ♯6 6 87
5 4 5 ♮–
3
9 8 – 4 76 4 43 6 6 – 5 67 7 8 –
2 3 5 4 – 3–

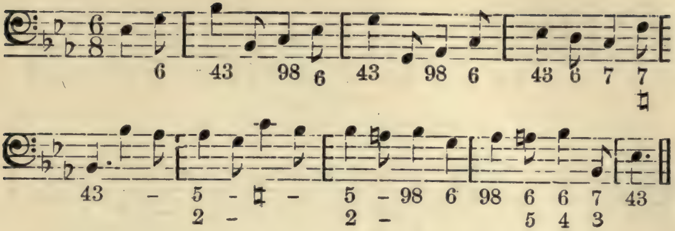
12.


5 – 7 6 6 9 8 7 6 4
2 – 5 – 3
4 – 4 5 – 7 9 8 7 4 3
2 – 2 2 –

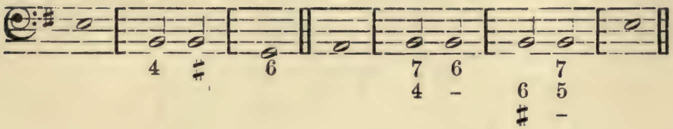
13.


6 9 8 6 9 8 6 9 8 6 ♮7 4 3 4
♮5 5 5 ♮
5 – 5 – 4 – 6 8 – – 7 9 8
2 – 2 – 2 – 7 6 – 5
4 – 3 –

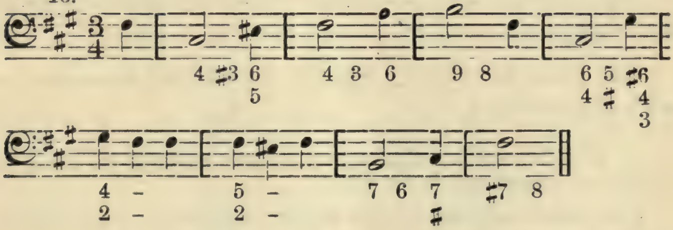
14.


6 43 98 6 43 98 6 43 6 7 7 ♮
43 – 5 – ♮ – 5 – 98 6 98 6 6 7 43
2 – 2 – 5 4 3

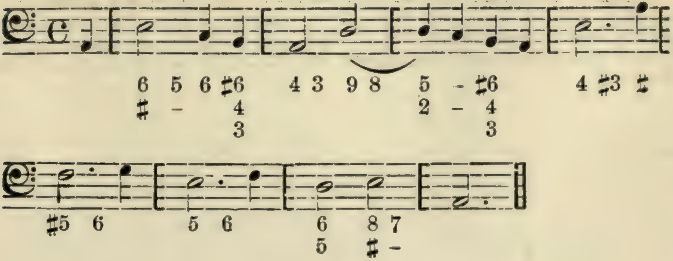
15.


4 ♯ 6 7 6 7
4 – 6 5
♯ –

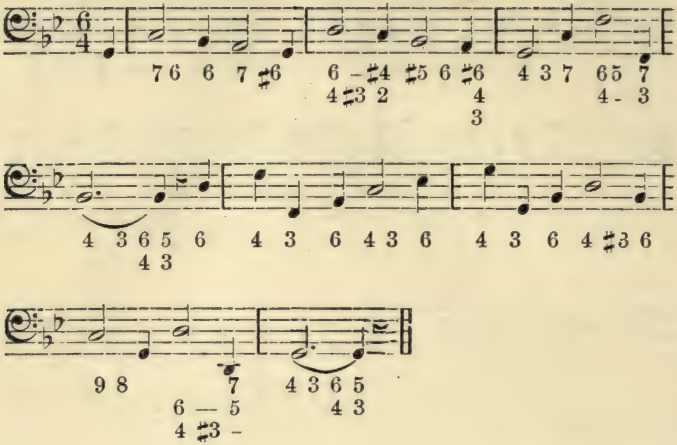
16.


4 ♯3 6 4 3 6 9 8 6 5 ♯6
5 4 ♯ 4
3
4 – 5 – 7 6 7 ♯7 8
2 – 2 – ♯

17.


6 5 6 ♯6 4 3 9 8 5 – ♯6 4 ♯3 ♯
♯ – 4 2 – 4
3 3
♯5 6 5 6 6 8 7
5 ♯ –

18.



19. Re-write Ex. 1, page 56, introducing single suspensions in root position.*

20. Re-write Ex. 4, page 82, introducing inversions of single suspensions.*

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* The melody given in this exercise may be changed, if it is desired to introduce suspensions in the treble.

The student may also re-write and add suspensions to the majority of the exercises on figured basses at the end of chapters VI, VII, VIII, IX and X.

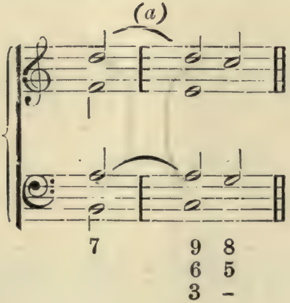
Special exercises on the harmonization of unfigured basses and melodies will be found at the end of chapter XVI. For practice in writing single suspensions, the student may take the exercises on unfigured basses and melodies (under part II) at the end of chapters VIII, IX and X.

CHAPTER XVI.

COMPOUND SUSPENSIONS.

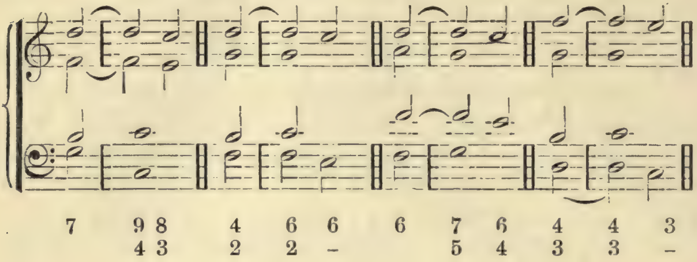
161. The **double suspensions** in most frequent use are those which may be formed by the combination of the single suspensions, 98, 43 and 78, and which, therefore, may be employed in the principal resolution of V7 (see § 145). Occasional use is also made of the 65 suspension, but the 23 is rarely employed, while the 45 is scarcely used at all.

Compound suspensions, whether double or triple, etc., (see § 144) may, as a rule, be introduced whenever the single suspensions by which they are formed can be correctly employed; one important exception, however, will be found in the following example, where the consecutive (perfect) fourths between the suspending and the suspended notes are *strictly forbidden.*

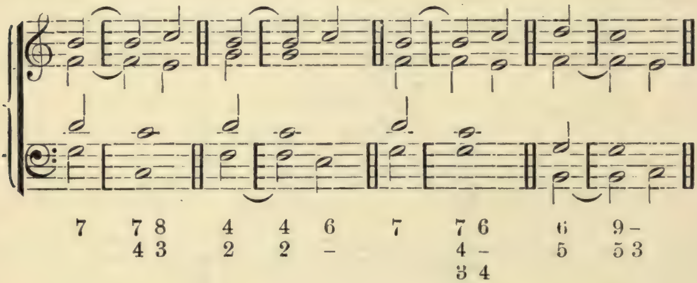


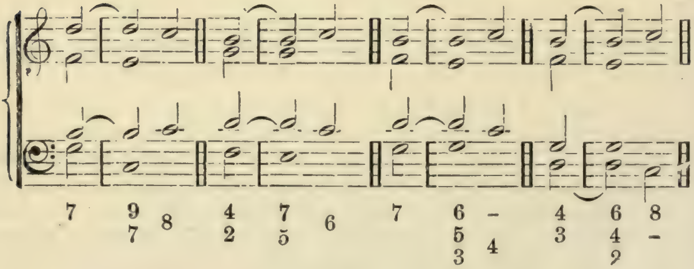
It would not be practicable to illustrate all the possible combinations of the single suspensions, nor, indeed, would any special purpose be served by attempting to do so. The principle upon which double and triple suspensions are formed being in every case identically the same, the student, after examining the following examples, should have no difficulty in comprehending other compound suspensions which, from time to time, may occur either in exercises or in musical compositions.

162. The $\begin{smallmatrix}9&8\\4&3\end{smallmatrix}$ suspension, symbol $\begin{smallmatrix}\mathrm{I}\\ {}'8\\ {}'3\end{smallmatrix}$, and its inversions are given in the following example.

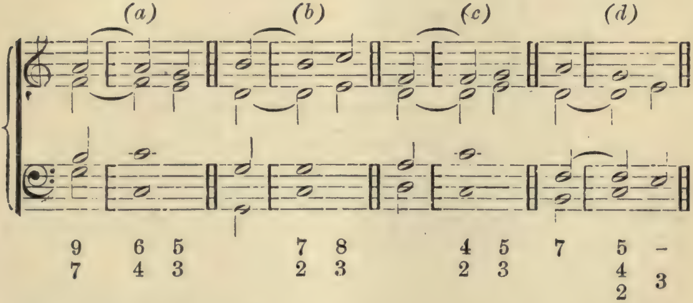


163. The $\begin{smallmatrix}7&8\\4&3\end{smallmatrix}$ suspension, symbol $\begin{smallmatrix}\mathrm{I}\\ {}'8\\ {}'3\end{smallmatrix}$, and its inversions are given in the following example.

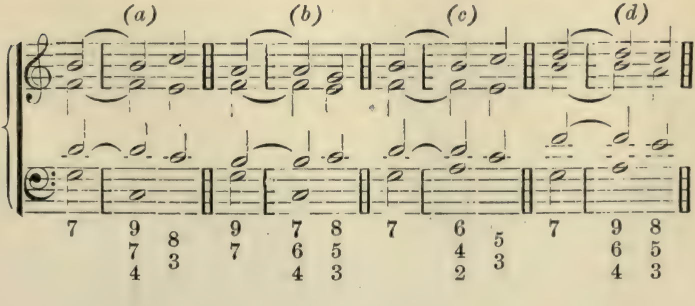


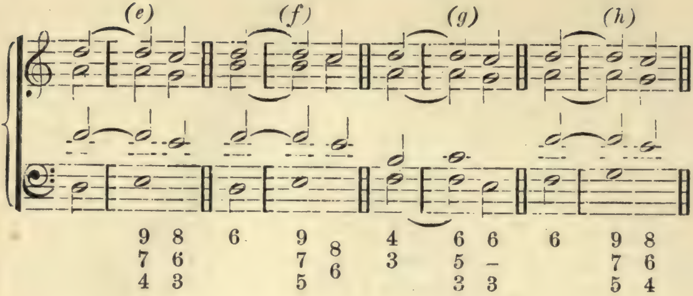


165. The following examples illustrate double suspensions (in root position) on the tonic, formed by the use of the other single suspensions. At *a*, the fifth and third are suspended, the chord of preparation being V9; at *b*, a double rising suspension is shown; at *c*, the very rarely employed 45 is introduced; the progression here, II to I, is not very good, and would be impracticable in *the minor mode*; this progression, as VI to V, in the key of F major would be quite correct; at *d*, the third in I is doubly suspended, the doubling of the third being necessary here on account of L7, the chord of preparation, and in order to avoid consecutive fifths.



166. Various **triple suspensions**, the most important of which are illustrated in the following example, are also in frequent use.



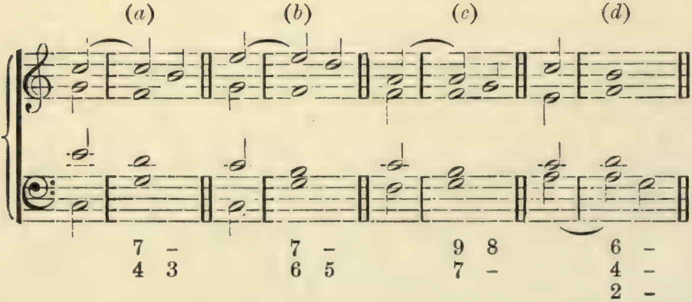


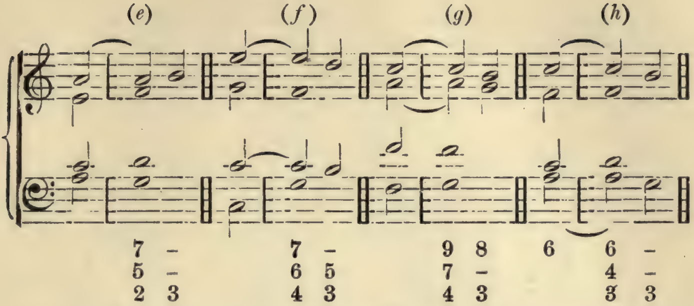
The symbols for the above suspensions are as follows :—

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
I	I	VI	VI	I^1	I^1	'I^1	I^2
¦8	,8	'5	'8	'8	¦8	'8	'8
'3	'5	¦3	'5	'5	'3	'5	'5
	'3		'3	'3			'3

167. Single and double suspensions, but not triple in four-part harmony, may be employed in connection with **the dominant seventh.** The 78 suspension is, of course, unavailable in this chord, while the 45 can only be well employed in conjunction with the 23.

The third in V7 is suspended at *a*; the fifth at *b*; and the octave at *c*; at *d*, the root is suspended in the bass; a rising suspension, 23, is shown at *e*; and at *f*, *g* and *h*, double suspensions are exemplified.

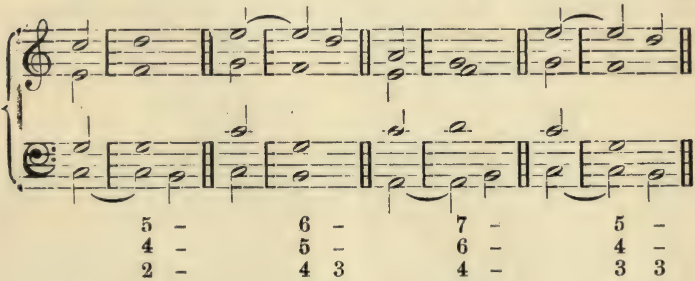




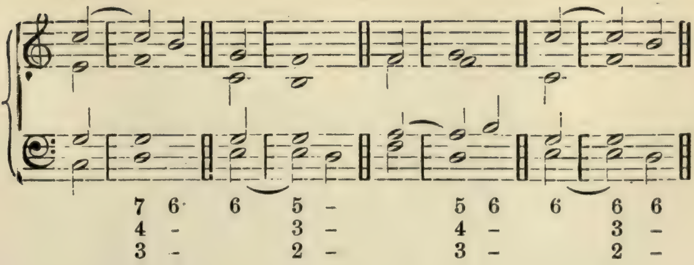
The symbols for the above suspensions are formed thus:—(*a*) $\underset{\uparrow 3}{\mathrm{V}7}$, (*b*) $\underset{\uparrow 5}{\mathrm{V}7}$, and so on.

168. The following examples illustrate the use of suspensions in connection with the inversions of V7.

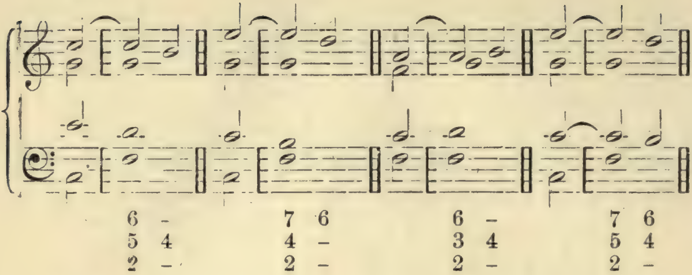
$\mathrm{V}7^{1}$.



$\mathrm{V}7^{2}$.

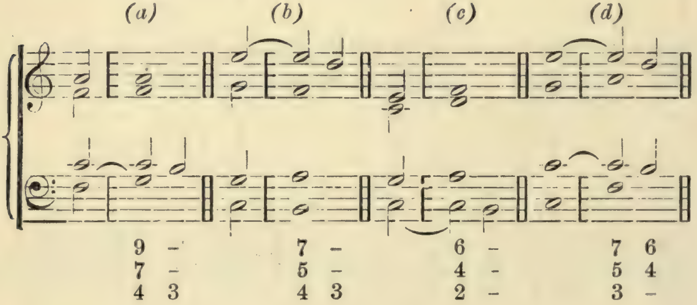


$V7^3$.



The student should find little or no difficulty in forming the symbols for the above suspensions; the principle of formation being the same as that for the triad and its inversions.

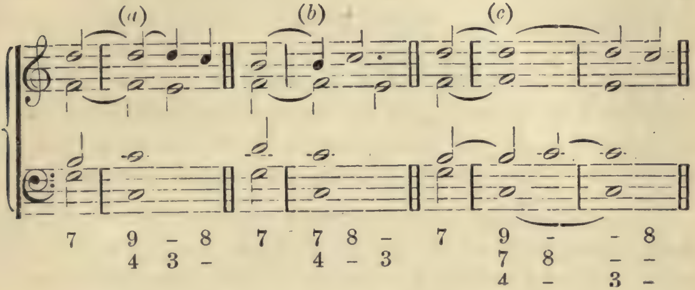
169. Suspensions are occasionally employed in connection with secondary sevenths and frequently in connection with **the dominant ninth** and its derivatives. At *a*, the third in V9 is suspended; at *b*, the third in L7; at *c*, the bass in L7; and at *d*, the third and (nominal) root in $L7^2$.



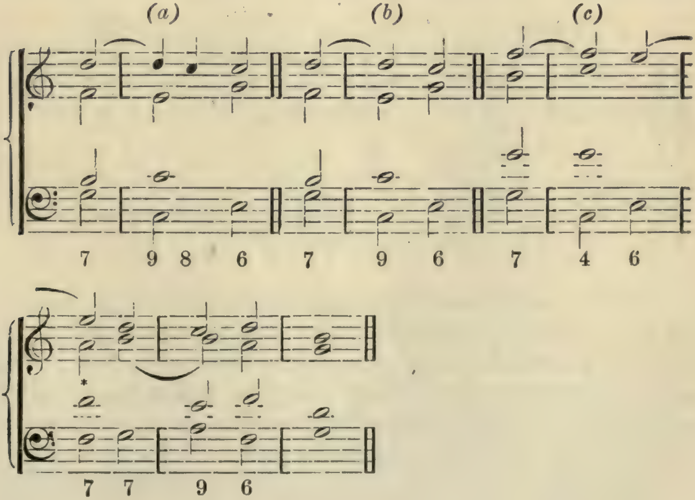
The symbols for the above suspensions are :—

(*a*)	(*b*)	(*c*)	(*d*)
V9 ʼ3	L7 ʼ3	ʼL7	$L7^2$ ʼ8 ʼ3

170. In all the above examples of compound suspensions the notes of resolution have occurred simultaneously; these notes, however, may occur *successively*, if so desired, as shown in the following examples.

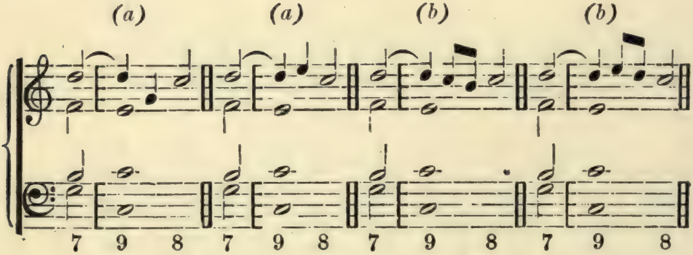


171. When the suspended note occurs at the same pitch in the chord which follows the suspension, the resolution of the suspending note may be *deferred*. Thus, the suspension at *a* may be treated with a broader effect as at *b*. The passage at *c* contains several examples of deferred resolutions of suspensions.

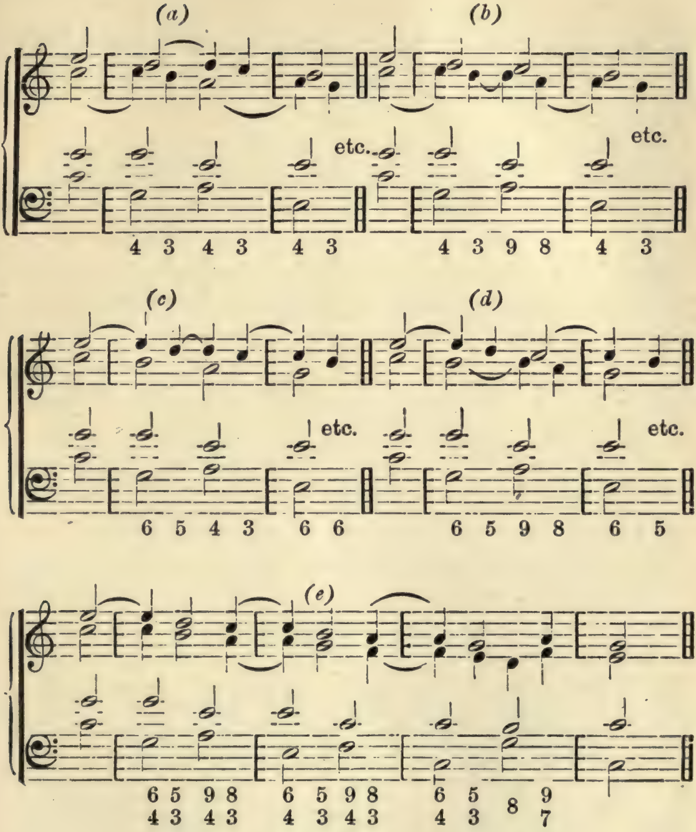


The figuring of the chord at * in the above example is unquestionably of an ambiguous character, for although this chord is in reality II^{1}_{8}, yet at the same time it might readily be mistaken for IV7. The context alone will decide the real significance of the figures. In the present instance, if the chord is regarded as IV7 the resolution is very exceptional; furthermore, IV7 rarely appears except in a sequence of secondary sevenths and then it resolves on L70; and on the other hand, if the chord is regarded as II^{1} the progression to V7 is not only perfectly natural but is also one of the strongest harmonic progressions.

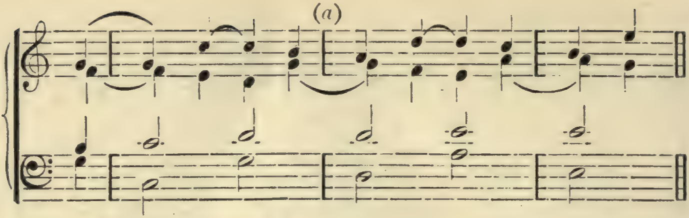
172. Suspensions are frequently resolved *ornamentally*, a form of resolution which has already been considered (§ 83) in connection with fundamental discords. The ornamental resolutions of suspensions in ordinary use are formed (*a*) by the introduction of another note of the chord, and (*b*) by the employment of auxiliary notes (§ 83). Another form of ornamental resolution is afforded by the use of the note B, as a free auxiliary note (see § 191).

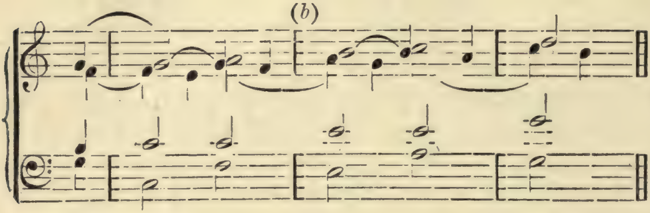


173. In **sequences**, especially when descending, suspensions may often be introduced; roots falling a fourth and rising a second alternately being exceptionally convenient for the employment of this form of discord. At *a*, *b*, *c* and *d*, various single suspensions are introduced in connection with this sequence; at *e*, these are united, forming a passage of double suspensions, and concluding with a variation of the perfect cadence.

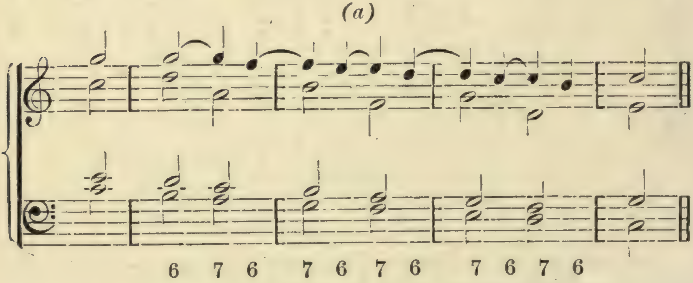


174. In order to prepare a suspension, it is often necessary, and always permissible, for a voice to *change from one note of a chord to another*, a device which is exemplified in the rising sequence at *a* ; and occasionally, provided there is a good reason for doing so, for example, to overcome an otherwise unavoidable difficulty, two parts are allowed *to cross one another*, as shown in the sequence at *b*.

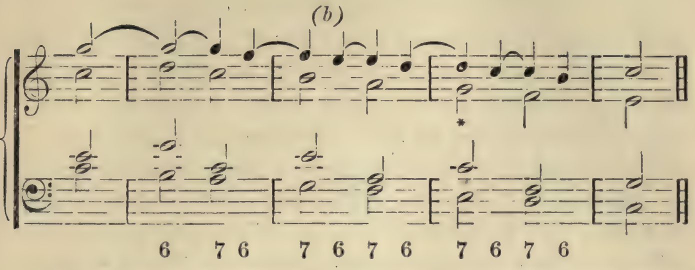




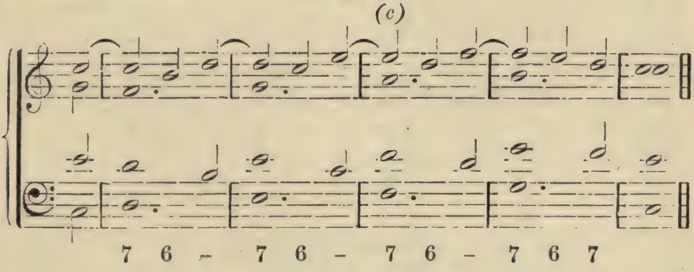
175. When two or more chords of the sixth occur in succession with the bass moving conjunctly, the sixth (root), if placed in the treble, may be suspended in each chord, forming a sequential passage, as at *a*.



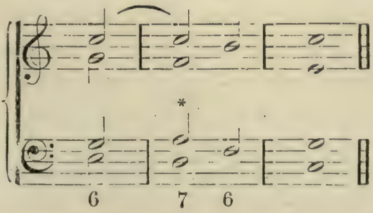
At *b*, is shown another treatment of the inner parts. There is little or no objection to the presence of the root in the chords marked *, as it is a ninth below the suspending note, and though approached conjunctly, yet the motion is contrary with the suspension; similar motion in this case would not be good.



The following passage illustrates a rising sequence formed by the use of the 76 suspension; the change of position on the third beat of each measure is necessary in order to prepare the succeeding suspension.

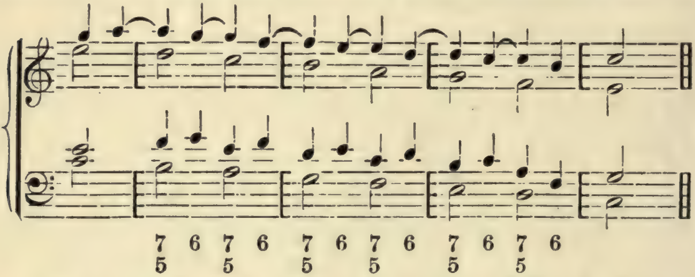


176. Formerly, when the 76 suspension occurred on II, the fifth of the bass was frequently added, the chord being thus converted into a secondary seventh, as at *; the fifth, it will be seen, moves to the third when the suspended note appears.



The chord at * in the above example must not be regarded as a true suspension, the slur simply indicates a syncopation;

nor does the figuring justify the presence of the fifth. When a secondary seventh resolves in this somewhat exceptional manner it *should* be figured $\begin{smallmatrix}7\\5\end{smallmatrix}$ 6. L^1, being the incomplete form of $V7^2$, the passage has the effect, to-day, of being a variation of the perfect cadence preceded by II7. The close proximity of the consecutive fifths—between the tenor and bass—which, under other circumstances, might be objectionable, has now no bad effect whatever; the intervening chord in fact, destroys the consecutiveness. Such being the case, the whole passage at *a*. § 175, may be varied by the employment of secondary sevenths alternating with chords of the sixth, as shown in the following example.

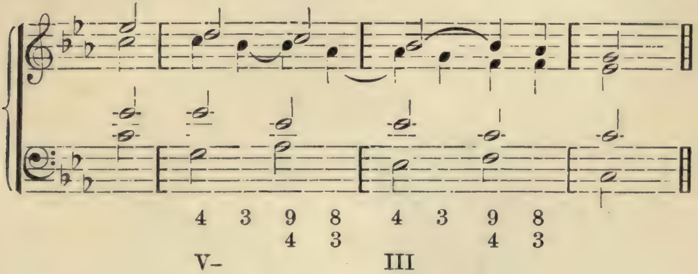


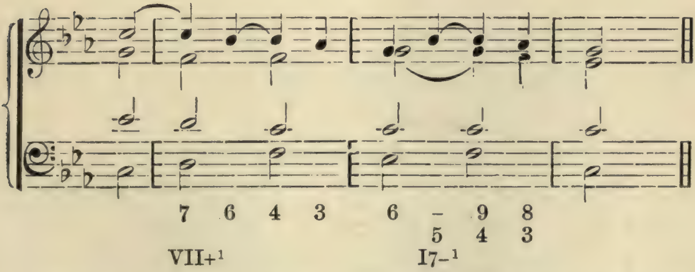
The student may re-write the above example introducing syncopations in the bass simultaneously with those in the treble; and again by introducing syncopations in the alto simultaneously with those in the treble and bass. Furthermore, it may here be said that many interesting variations of this sequential passage may be formed by the use of passing notes, ornamental resolutions, etc.

177. Although the examples in the present chapter (as was the case also in the preceding chapter) have all been given in the major mode, and almost exclusively in connection with the tonic chord, yet, with few exceptions (due to the augmented second between the submediant and the leading note) these examples are *equally available in the minor mode*, and in the majority of cases may be employed in connection with any major or minor common chord. At the same time, it must be remembered, that as every common chord possesses a certain individuality peculiar to itself, according to the key to which it belongs, so likewise the suspensions which can be effectively employed in connection with

a chord vary according to the progression in which the chord may happen to occur. For example, the progression at *c*, § 165, which, as II to I, is possible but not good in the key of C, becomes acceptable and very good as VI to V in the key of F.

In the minor mode, in order to introduce the suspended submediant, it is necessary to employ the **subtonic,** (symbol VII, the note *a tone* below the tonic). The chords in which the subtonic usually occurs are, III+, V–, VII+, and the occasionally used I7–. Suspensions in connection with these chords are exemplified in the following passages.





178. In harmonizing **unfigured basses** and **melodies,** before suspensions of any kind can be introduced, the chords employed must be *correct* both in themselves and in relation to one another. A progression which is *bad* without a suspension is equally bad if a suspension is introduced. No new rules arise in this connection in the matter of harmonic progressions, the

tables in § § 74 and 75, therefore, will serve all purposes, speaking generally, for the introduction of suspensions. Conjunct movement, and this with a tendency to fall rather than to rise, is necessarily indispensable, if suspensions are to be employed. Harmonic progressions may be said to be welded together, as it were, by means of suspensions, and a continuity of effect is thereby imparted to a succession of chords which could not be obtained otherwise. The special purpose of these discords is to arrest the attention and to awaken expectancy, they should, therefore, be introduced with discretion; when employed judiciously, they not only lend interest, but also impart strength and character, to even the simplest passages.

SUMMARY.

§ 161. Double suspensions.

The most important are those which occur in the principal resolution of V7.

§ 162. The $\begin{smallmatrix}9&8\\4&3\end{smallmatrix}$ suspension.

§ 163. " $\begin{smallmatrix}7&8\\4&3\end{smallmatrix}$ "

§ 164. " $\begin{smallmatrix}9\\7\end{smallmatrix}8$ "

§ 165. Other double suspensions.

§ 166. Triple suspensions.

§ 167. Suspensions in connection with V7.

§ 168. " " " " the inversions of V7.

§ 169. " " " " V9.

§ 170. The dissonant notes resolved successively.

§ 171. Deferred resolutions.

§ 172. Ornamental resolutions.

§ 173. Suspensions in sequences.

§ 174. Change of position and crossing of parts in order to prepare the suspension.

§ 175. Suspensions in a succession of chords of the sixth.

§ 176. The 7 6 on II as formerly employed.

§ 177. Suspensions in the minor mode.

These are practically the same as the suspensions in the major mode, except that it is necessary to avoid the interval of the augmented second (VI to L), for which purpose the additional triads (pages 43 and 90) are occasionally employed.

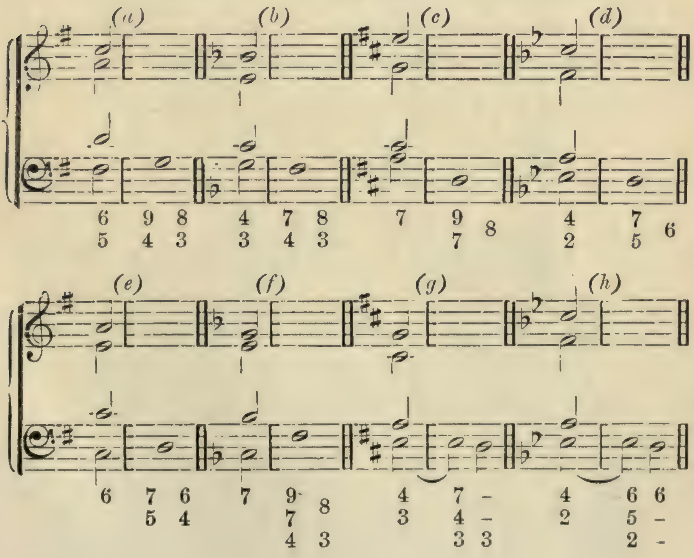
§ 178. Unfigured basses and melodies.

Suspensions may be employed when they can be properly prepared and resolved ; but it must be remembered that a progression which is incorrect in itself will be equally incorrect if suspensions are introduced.

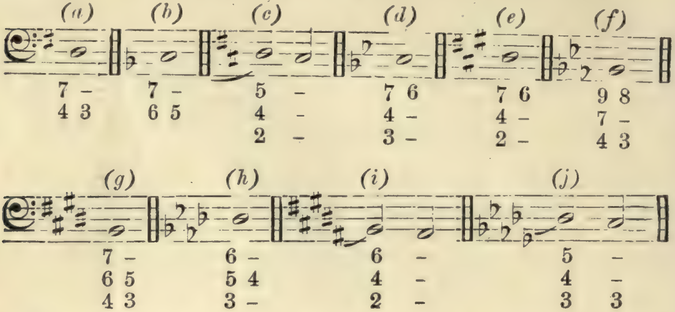
EXERCISES.

I.

1. Complete the following progressions.



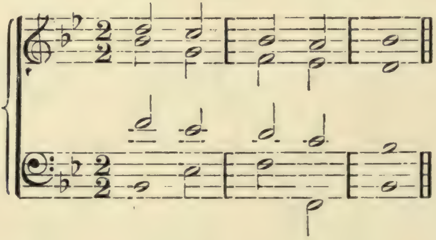
2. Write a chord of preparation, and harmonize the following suspensions. In each case give the symbol.



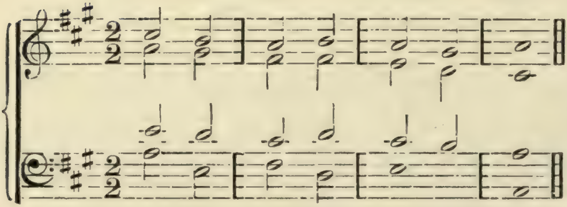
By transposing each of the above bass-notes a minor third lower, and at the same time retaining the same key signatures, these suspensions may be worked in the relative minor keys. The leading-note in each example will require an accidental.

Re-write the following passages each five times, introducing (a) single suspensions in the treble, (b) in the alto, (c) in the tenor, (d) double suspensions in the treble and tenor, and (e) triple suspensions. Figure the chords throughout.

3.

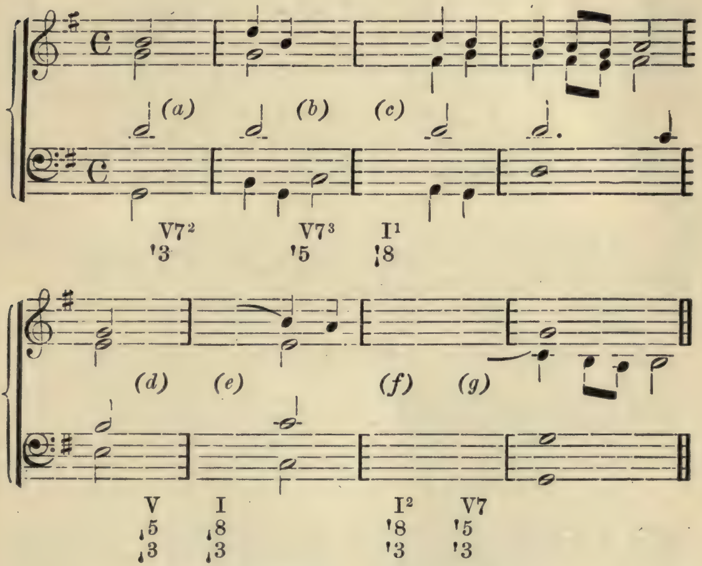


4.



5. Write, in the key of F, the double suspension $\begin{smallmatrix}9 & 8\\ 4 & 3\end{smallmatrix}$ and its inversions.

6. Complete the following passage by introducing at a, b, c, etc., the chords indicated by the symbols.



7. Harmonize the descending scale of A, introducing the 76 suspension on each degree except the tonic.

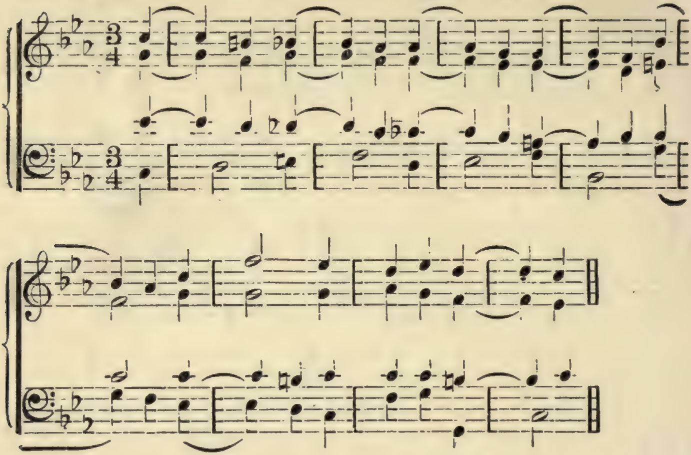
8. Exemplify, (a) in the key of A flat and (b) in the key of C sharp minor, the suspensions indicated by the following symbols.

$$\begin{array}{llllllll} \mathrm{I} & \mathrm{I}^1 & \mathrm{I}^2 & \mathrm{VI} & '\mathrm{V}7^1 & \mathrm{V}7^3 & \mathrm{V}9 & \mathrm{L}7^2 \\ ,8 & {\vdots}8 & '8 & '5 & & '5 & '3 & '8 \\ '3 & & '3 & {\vdots}3 & & & & '3 \end{array}$$

9. Prepare and resolve the following suspensions, (a) in the key of E and (b) in the key of F minor.

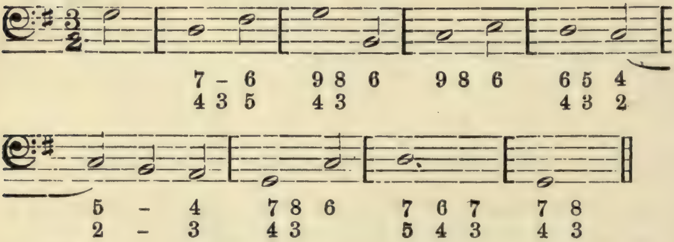
$$\begin{array}{cccccccc} 9\;8 & 7 & 7\;8 & 7\;- & 9\;8 & 7\;8 & 6\;- & 6\;- \\ 4\;3 & 5\;^{6} & 2\;3 & 6\;5 & 7\;6 & 6\;5 & 3\;4 & 4\;- \\ & & & & 5\;4 & 4\;3 & 2\;- & 2\;- \end{array}$$

10. Figure the bass of the following passage.



Add treble, alto and tenor parts to the following basses.

11.



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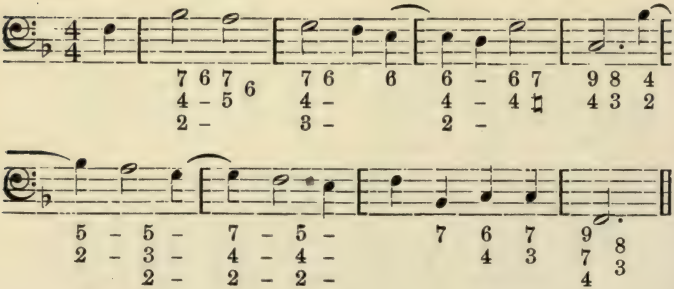
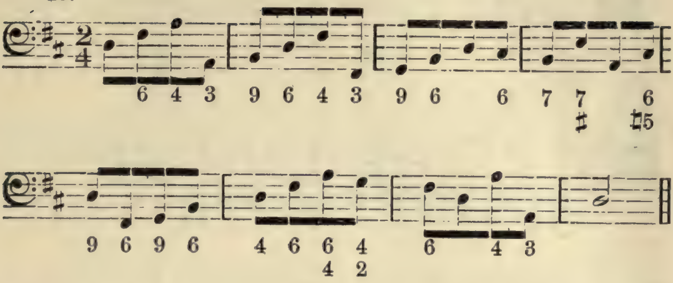
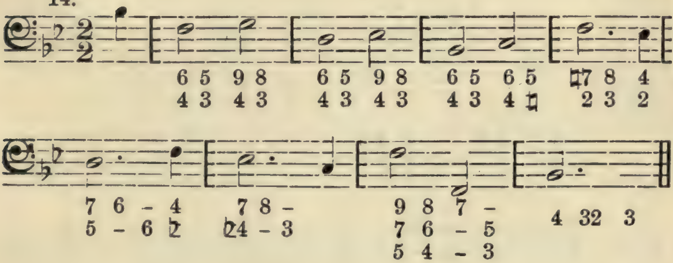


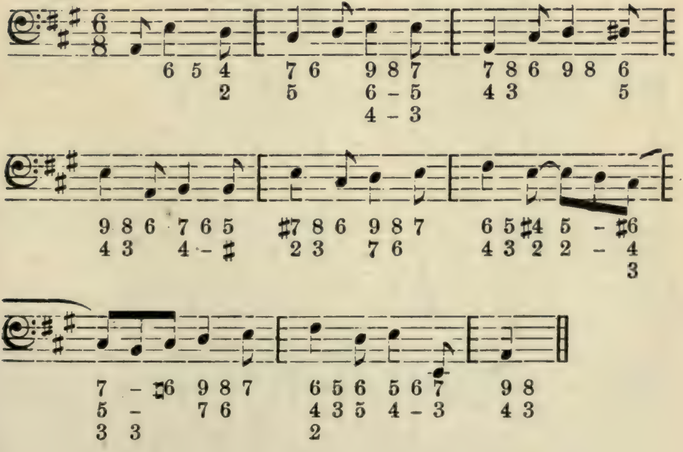
13.


6 4 3 9 6 4 3 9 6 6 7 7 6
♯ ♮5
9 6 9 6 4 6 6 4 6 4 3
4 2

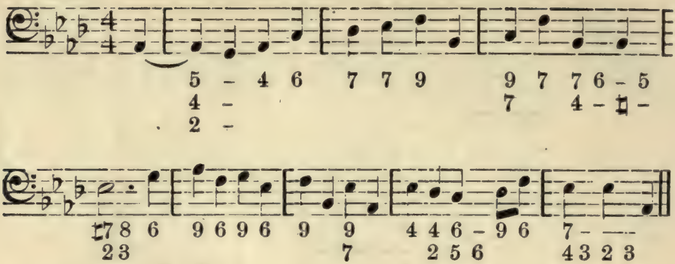
14.


6 5 9 8 6 5 9 8 6 5 6 5 ♮7 8 4
4 3 4 3 4 3 4 3 4 3 4 ♮ 2 3 2
7 6 – 4 7 8 – 9 8 7 –
5 – 6 ♮ ♮4 – 3 7 6 – 5 4 32 3
5 4 – 3

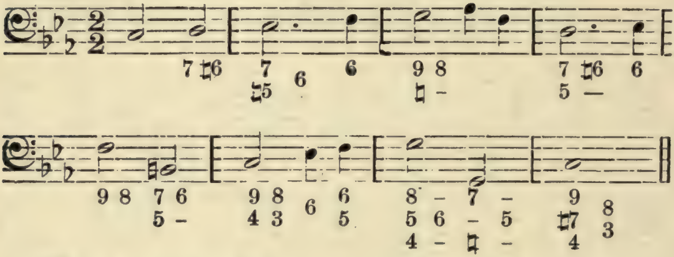
15.


6 5 4 7 6 9 8 7 7 8 6 9 8 6
2 5 6 – 5 4 3 5
4 – 3
9 8 6 7 6 5 ♯7 8 6 9 8 7 6 5 ♯4 5 – ♯6
4 3 4 – ♯ 2 3 7 6 4 3 2 2 – 4
3
7 – ♮6 9 8 7 6 5 6 5 6 7 9 8
5 – 7 6 4 3 5 4 – 3 4 3
3 3 2

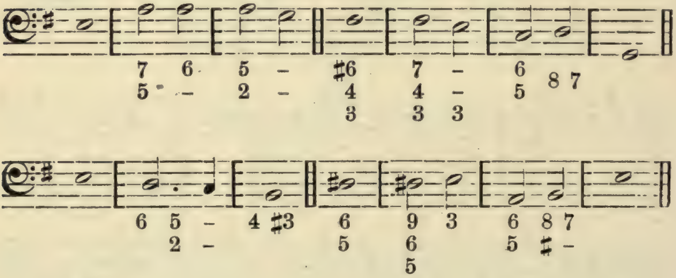
16.


5 – 4 6 7 7 9 9 7 7 6 – 5
4 – 7 4 – ♮ –
2 –
♮7 8 6 9 6 9 6 9 9 4 4 6 – 9 6 7 – —
2 3 7 2 5 6 4 3 2 3

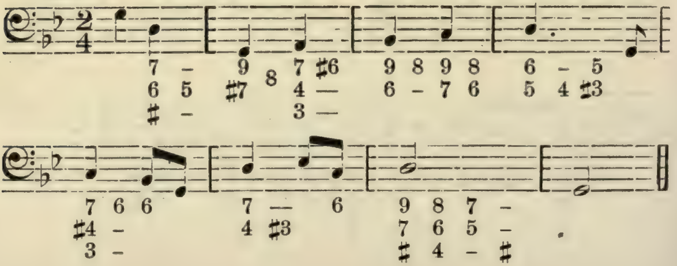
17.


7 ♮6 7 6 6 9 8 7 ♮6 6
♮5 ♮ – 5 —
9 8 7 6 9 8 6 6 8 – 7 – 9 8
5 – 4 3 5 5 6 – 5 ♮7 3
4 – ♮ – 4

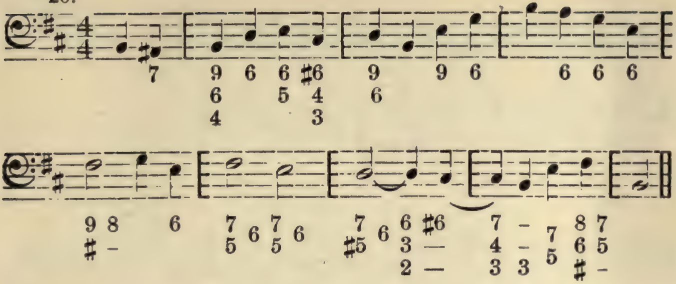
18.


7 6 5 – ♯6 7 – 6 8 7
5 – 2 – 4 4 – 5
3 3 3
6 5 – 4 ♯3 6 9 3 6 8 7
2 – 5 6 5 ♯ –
5

19.


7 – 9 8 7 ♯6 9 8 9 8 6 – 5
6 5 ♯7 4 — 6 – 7 6 5 4 ♮3
♯ – 3 —
7 6 6 7 — 6 9 8 7 –
♯4 – 4 ♯3 7 6 5 –
3 – ♯ 4 – ♯

20.



II.

Harmonize the following unfigured basses.

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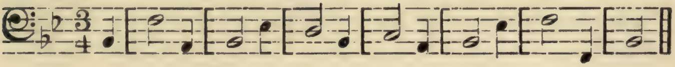

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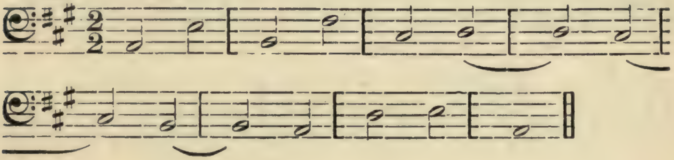

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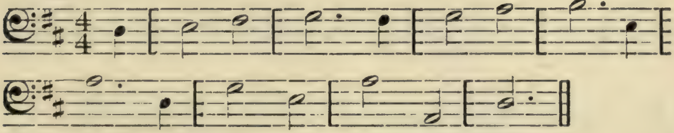

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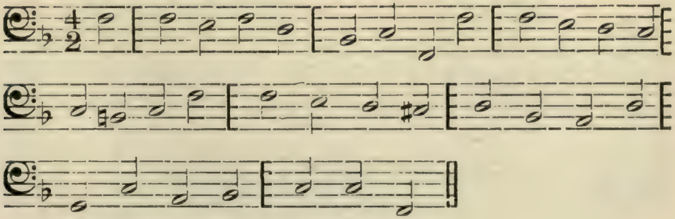

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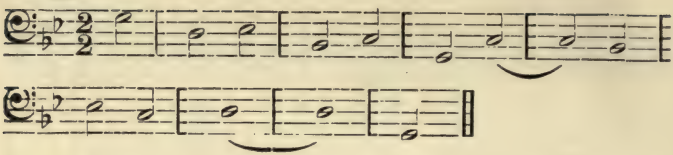

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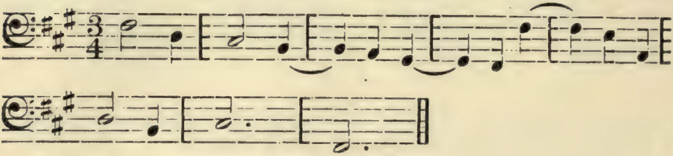
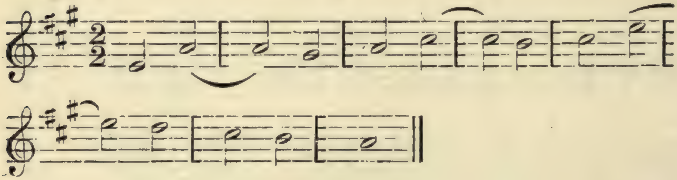


Harmonize the following melodies.

27.



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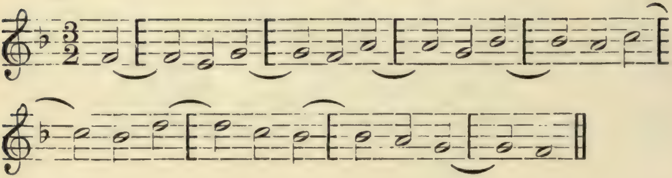

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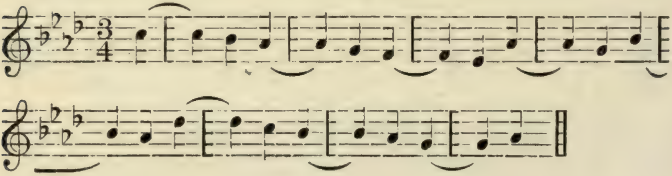

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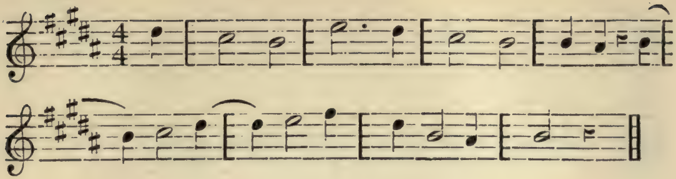

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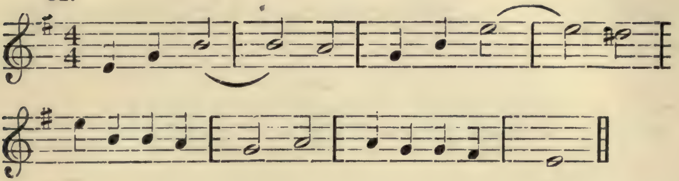

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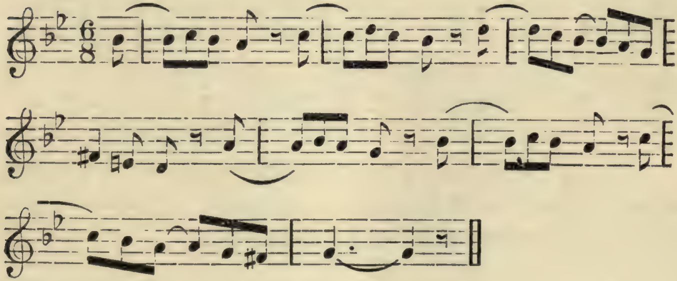
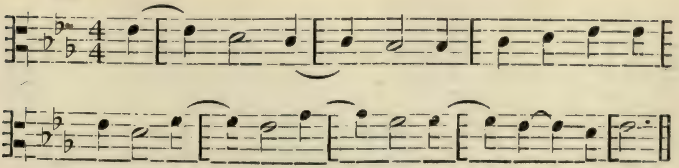


Add a figured bass and two upper parts to the following given inner parts, the syncopated notes to be treated as suspensions. Write in open score.

33.



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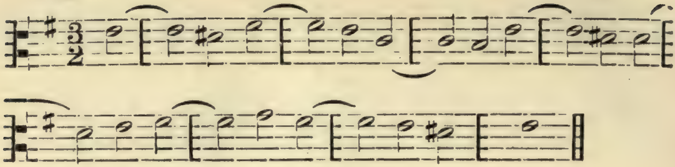

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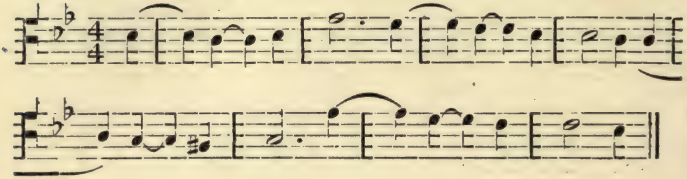

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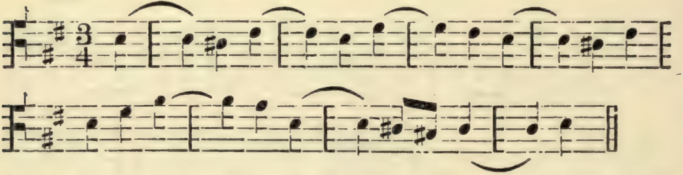
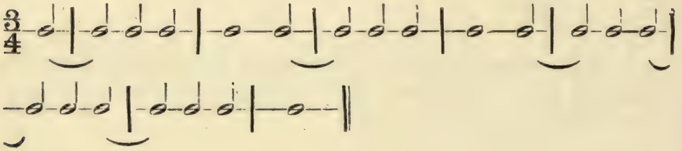


Clothe the following blank rhythms with harmony, introducing suspensions of as varied a character as possible. Each rhythm may be worked in both modes.

37.



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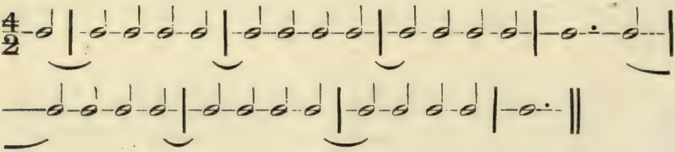
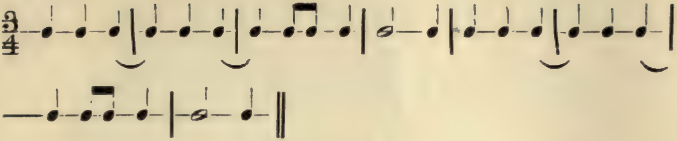


39.



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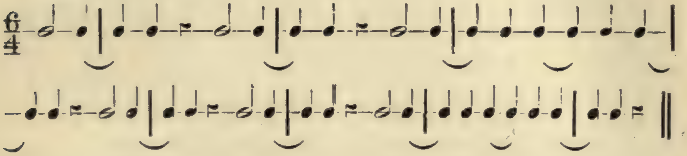


41. Compose a double chant in the key of E flat, modulating to the dominant in the second phrase and to the relative minor in the third, and introducing compound suspensions.

42. Write a passage in the key of C sharp minor, introducing various suspensions, examples of fundamental discords, and modulations to attendant keys.

CHAPTER XVII.

AUXILIARY NOTES.

179. The notes immediately above and below any given note are called, respectively, its *upper* and *lower* **auxiliary notes** (§ § 122 and 144). These auxiliary notes, having been considered in their connection with *suspensions*, will now be considered in their capacity of *ornamental* notes.

Auxiliary notes, whether employed as suspensions or otherwise, are also called *unessential* discords, in order to distinguish them from the seventh and ninth in fundamental discords, which, being characteristic notes of the chord, are called *essential* discords.

Under the heading of auxiliary notes are included :—

Discords by transition—	Turning notes. Changing notes. Passing notes.

Appoggiaturas.
Anticipations.
Retardations.

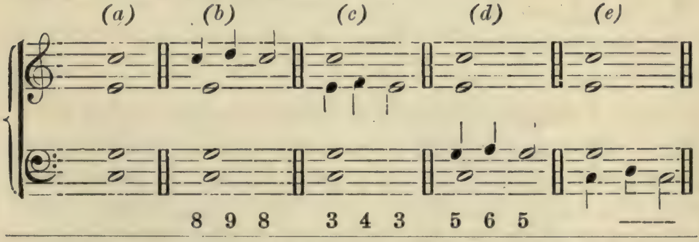
To the above are sometimes added Arpeggios and Pedals. The arpeggio, however, is a device employed—like auxiliary notes—to lend variety and to add interest to an otherwise simple succession of chords ; while the pedal is a sustained dissonant note entirely distinct from all other discords. Arpeggios and pedals, together with certain chromatic chords (originally derived—it is presumed—from auxiliary notes) will be considered in the following chapter.

Although passing notes—the most frequently employed form of auxiliary notes—were in use, as a matter of fact, prior to suspensions, and suspensions, as has already been stated (§ 144), prior to fundamental discords, yet it is customary to treat of these chords in the order adopted in the present work.

In counterpoint, the historical influence of these unessential discords is still to be seen, for passing notes are employed in the second and third species, while suspensions appear for the first time in the fourth species ; the fifth species (florid counterpoint) consisting of the judicious employment of both suspensions and passing notes.

180. Discords by transition constitute the most important class of auxiliary notes; they are sub-divisible, as stated above, into turning, changing and passing notes.

A **turning note*** is the name given to an auxiliary note, which, having been introduced after a consonant note, immediately *turns back* to that consonant note; a turning note, therefore, is invariably approached and quitted *conjunctly*. The following examples illustrate the use of the *upper auxiliary note*, treated as a turning note, to the third, the fifth and the octave in the chord of C. At *a*, is the unadorned common chord of C; at *b*, *c*, *d* and *e*, turning notes are shown in the treble, alto, tenor and bass respectively; at *f*, *g* and *h*, double turning notes are introduced, these being always effective when they move in consecutive thirds or sixths; not only must consecutive fifths and octaves be avoided but consecutive fourths also, as at *i*; at *j*, turning notes are shown in all three upper parts, and here the consecutive fourths between the treble and alto are good, since with the moving tenor part on the second and third beats the effect is that of two chords of the sixth occurring on a sustained bass note, the bass in this case being, to all intents and purposes (see § 203), a pedal note.



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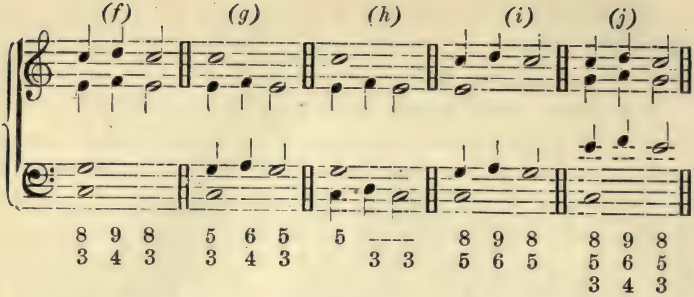
* By most authorities 'turning notes' are known and called by the general name of auxiliary notes; it is, however, both convenient and desirable to employ a particular name for each class into which these auxiliary discords may be divided. The significance of the term 'turning,' which is here suggested and employed, the author believes, for the first time, can scarcely be misunderstood, for not only does this form of auxiliary note turn back instead of proceeding onwards, as in the case of 'passing notes,' but by so doing it also forms part of the ornament commonly called a 'turn.'



181. When the upper auxiliary note* is employed as a turning note it is customary to use it in its diatonic form, but when the lower auxiliary is so employed, it is usual, except in the case of the major third of a chord, to approach and quit the auxiliary note by the interval of a *semitone* only. When the lower auxiliary to the major third is employed, it may be taken as either a tone or a semitone. This semitonal movement will, therefore, frequently necessitate the use of chromatic notes; such notes are chosen from the ascending melodic form of the chromatic scale (§ 30), A sharp (× VI) being employed instead of B flat (VII) as the chromatic lower auxiliary to B (L). In the case of double auxiliary notes, if one part proceeds to and from a chromatic note the other part must move by semitones.

The following examples illustrate the use of the *lower auxiliary note* as a turning note, in connection with the above chord of C. At *a*, *b*, *c*, *d* and *e*, single turning notes are exemplified in the various parts, the major third being treated diatonically at *b*, and chromatically at *c*; double turning notes between the treble and alto may be taken either as at *f* or *g*; the example at *h* is incorrect, for since the tenor moves to a chromatic note, the alto in this case must also move to a chromatic note, as at *i*; or, if preferred, these parts may both move diatonically as at *j*, such a movement, however, would savor of strict counterpoint rather than of modern harmony.

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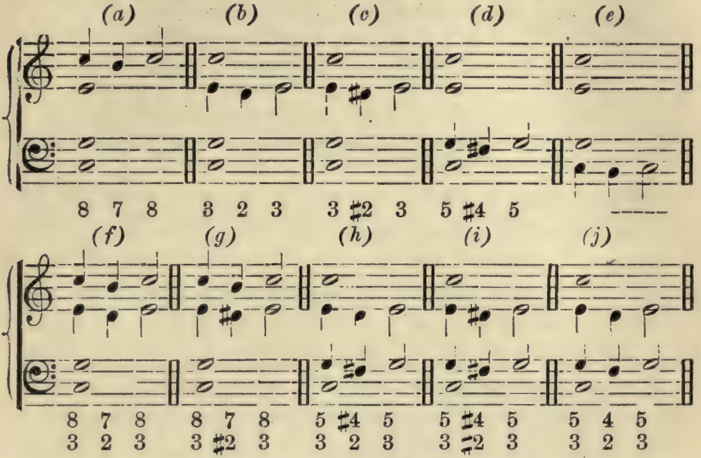
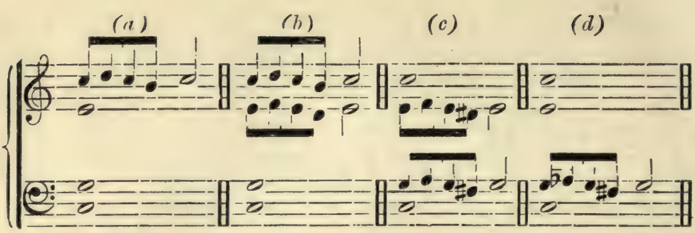
* The word 'note' is often omitted in this connection.



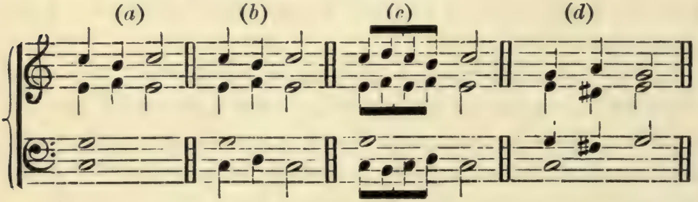
182. Although the bass in the above examples has in every case been figured, yet it is the exception rather than the rule to represent unaccented auxiliary notes by figures, unless indeed they possess some important and characteristic features. Accented auxiliary notes must necessarily be figured. When auxiliary notes occur in the bass, the line of continuation (§ 73) is employed.

The upper and lower auxiliaries of a consonant note may occur in succession as turning notes, as at *a*, in which case the resultant figure is a turn; at *b* and *c*, double turns are exemplified; the turn in the tenor at *d* contains a chromatic upper as well as a chromatic lower auxiliary note; this turn may be effectively combined with that in the alto at *c*, but not with that at *b*.

The student is advised not to employ, at least for the present, chromatic upper auxiliary notes. All chromatic notes, in fact, belong to the realm of chromatic harmony, a subject which will be considered in Part III of the present work; it is, however, often impracticable, as has already been seen, to treat of one subject completely to the exclusion of other subjects.

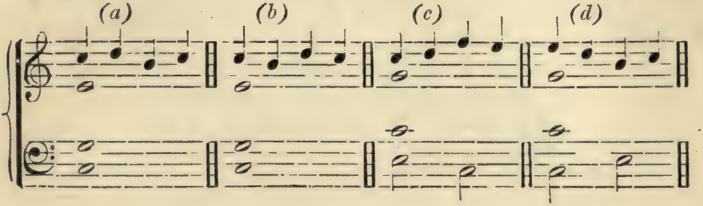


183. The upper and lower auxiliaries of a consonant note may also occur in combination, provided that at least one characteristic note of the chord is sustained throughout, as shown at *a*; at *b*, however, the additional auxiliary note in the bass forms, with the upper parts, an *independent* chord, namely V7¹, and such a chord is commonly called a 'passing chord,' or, in this case, it might be called a turning chord, (the significance of the term 'passing six-four,' § 69, will now be seen); at *c*, two such chords are introduced, the treble here consisting of a turn, the bass an inverted turn, and the alto a short shake. At *d*, the turning notes form with the sustained bass note a chord of the diminished seventh; this, however, is a *fortuitous* chord, for D sharp must not be regarded as the nominal root, nor must B be regarded as the generator.



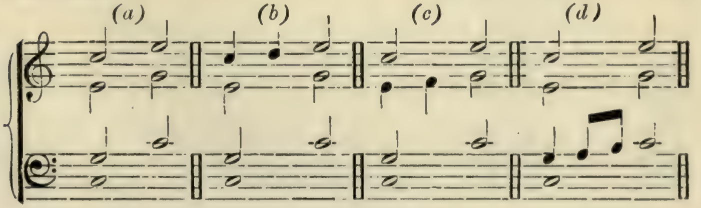
184. Auxiliary notes are frequently approached and occasionally quitted by disjunct movement. If the lower auxiliary is approached conjunctly, it may at once proceed to the upper, and vice versa, provided that the intervening consonant note is then immediately heard; the auxiliaries, in this case, are called *changing notes.*

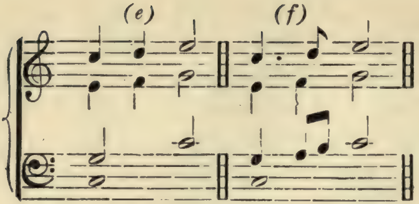
Changing notes may be introduced, either when a consonant note is repeated, as at *a* and *b*, where the note C is heard on both the first and fourth beats of the measure, or, when the succeeding consonant note is at the interval of a third above or below the first, as *c* and *d*. These changing notes are exemplified in the treble only, but they may be freely employed in any part.



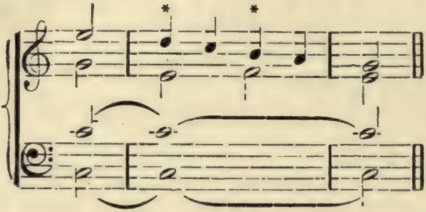
185. An auxiliary note, instead of returning, may *pass onwards* to the nearest consonant note; when treated thus, auxiliary notes are called *passing notes.*

Passing notes, the most frequently employed, and the most important form of discord by transition, may be either diatonic or chromatic, and may occur on either an accented or an unaccented beat. An opportunity is afforded for the employment of passing notes when the position of a chord is changed, as at *a*. At *b*, *c* and *d*, passing notes are introduced in the treble, alto and tenor parts respectively; double passing notes are shown at *e*; and at *f*, passing notes occur in each part; the consecutive fifths in this last example (between the alto and tenor) are not objectionable, the fifth above L being diminished.

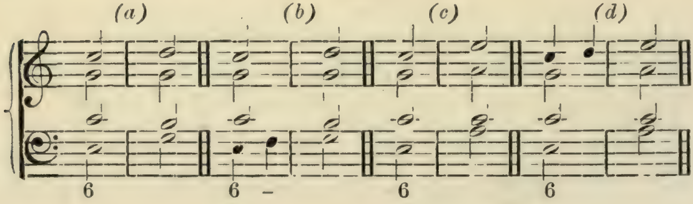




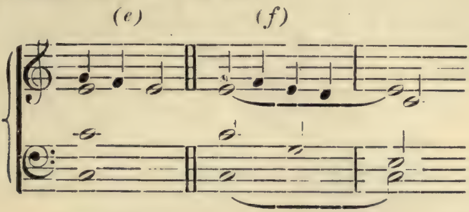
In the following passage, at * * is exemplified the use of accented passing notes.



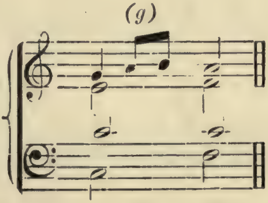
186. It is necessary to exercise care in the employment of these discords, for a progression which is correct without them *may be made incorrect* if they are injudiciously introduced. The progression at *a*, as it stands, is good (§ 65), if, however, a passing note is introduced in the bass, as at *b*, objectionable consecutive fifths will arise between the extreme parts. Again, a bad progression *will not be made good* by the employment of passing notes; the progression at *c* is bad (§ 65), and that at *d*, with a passing note in the treble is not any better, even though the hidden fifths between the extreme parts are approached conjunctly, and quite irrespective of the consecutive fifths between the treble and alto.



A passing note should not approach a sustained consonant note by the interval of *a second*, as at *e*, unless it is for the express, though somewhat rare purpose of passing through it, and thus *crossing* the parts, as at *f*.

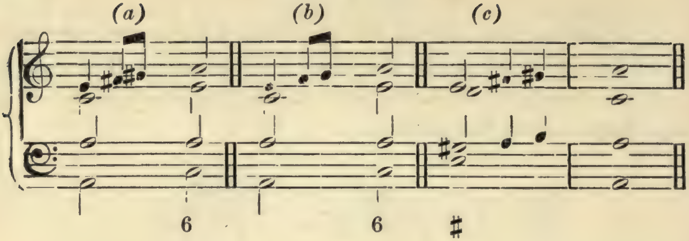


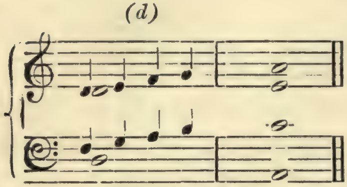
When two passing notes occur in succession, as at *g*, the second of the two *must in no case be treated as a turning note.* Passing notes must invariably pass *onwards*, turning notes alone can return.

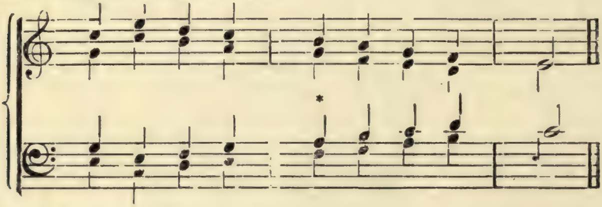


If the B in the above passage were flattened, the first chord would become a varied form of V7, and as such the progression would be quite correct.

187. In the minor mode, in order to avoid the augmented second (between –VI and L), recourse is made to *the melodic form* of the scale, which may be freely employed for this purpose, provided that the chords themselves are constructed from the harmonic form of the scale (§ 33). Thus, at *a*, the ascending form of the scale (with +VI) is employed; at *b*, the descending form (with VII) is employed, notwithstanding that the passing notes ascend; at *c*, +VI is shown in connection with the dominant seventh; and at *d*, VII, in both treble and tenor, in connection with the subdominant chord.



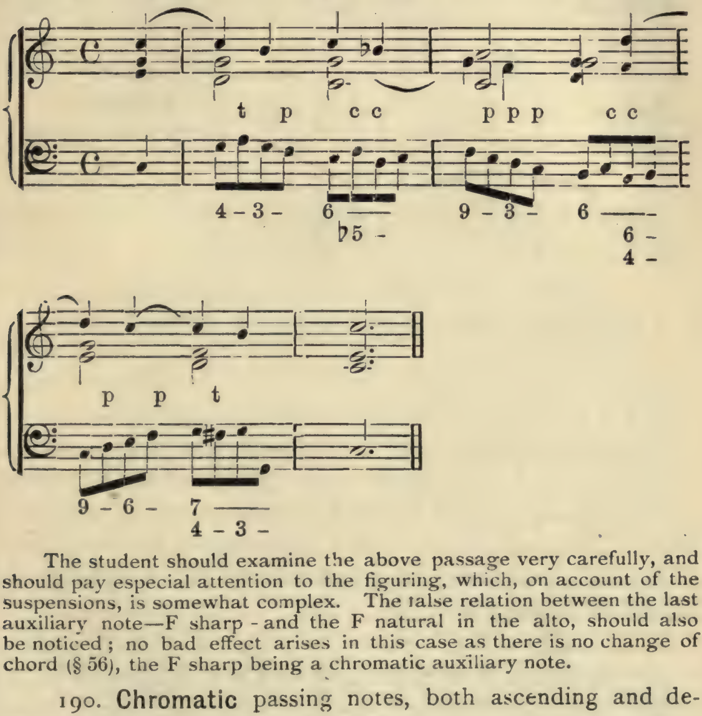




Turning and changing notes when employed in the minor mode are treated in a similar manner, the melodic form of the minor scale being used alone and expressly in order to avoid movement by an augmented second.

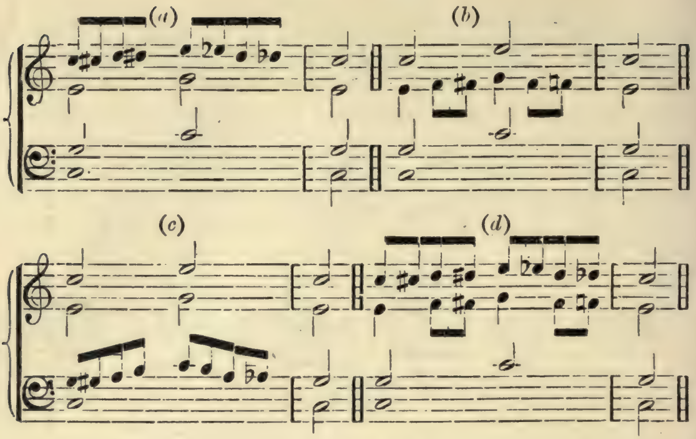
188. When passing notes occur in combination, they should, as a rule, be *consonant with one another*, movement in thirds and sixths being almost invariably very effective; movement by dissonant intervals, however, and those occasionally of the harshest character, is tolerated when combined passing notes occur in scale passages proceeding by contrary motion. The exceptional combinations which frequently arise under such conditions, as for example that at *, must again be regarded as fortuitous chords. This passage, it will be seen, concludes with turning notes in the alto and tenor, in order to avoid crossing the parts.

189. In the following example various auxiliary notes are introduced in the bass; the tenor, in this case, is written on the treble stave in order that space may be obtained for the letters 'p,' 'c' and 't,' here employed to indicate respectively the passing, changing and turning notes, as they occur in the bass.

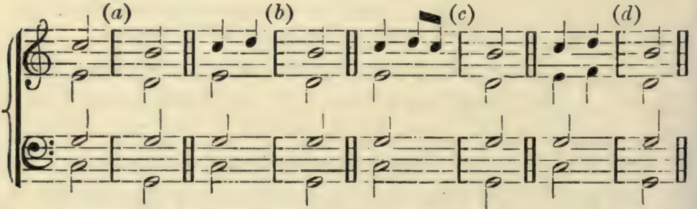


The student should examine the above passage very carefully, and should pay especial attention to the figuring, which, on account of the suspensions, is somewhat complex. The false relation between the last auxiliary note—F sharp - and the F natural in the alto, should also be noticed; no bad effect arises in this case as there is no change of chord (§ 56), the F sharp being a chromatic auxiliary note.

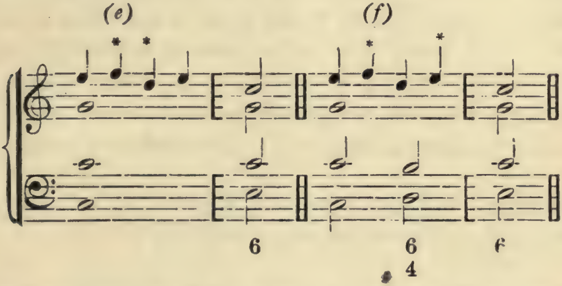
190. **Chromatic** passing notes, both ascending and descending, are illustrated in the following example in connection with the chord of C; at *a*, in the treble; at *b*, in the alto; and at *c*, in the tenor. The passing notes at *a* and *b* may be effectively combined as at *d*; those at *a* and *c*, however, must not be combined on account of the consecutive fourths which would arise between two moving parts; nor, moreover, those at *b* and *c*, on account of the resultant consecutive fifths.



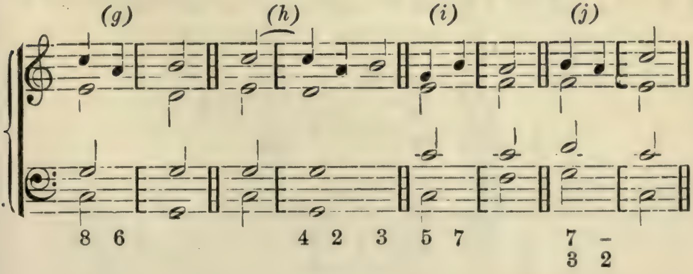
191. When two notes occur in succession at the interval of a second apart, it is evident that a diatonic passing note cannot be employed between them; thus, in the imperfect cadence at *a*, it would be impracticable to introduce a passing note in the treble. The upper auxiliary note to the first note, when—as in the present instance—it falls one degree may, however, be introduced as at *b*. The auxiliary note in this case may be regarded as being a free treatment of the turning notes, as shown at *c*; it may, therefore, be called a *free* or *disjunct* turning note. At *d*, free turning notes are introduced in both treble and alto.



An interesting point arises in this connection. If the changing notes at *e*, marked * *, are re-written, as at *f*. and at the same time a passing note, D, is introduced in the bass, together with a turning note, B, in the tenor, then on the third beat of the measure a passing chord appears, and in this case it is an independent chord, V^2, and must be so regarded; the D, in the treble, therefore, which was *dissonant* before is now *consonant*, while the succeeding note, E, is now dissonant, whereas before it was consonant. From either point of view, the auxiliary notes are correct, those at *f*, marked * *, being free turning notes.

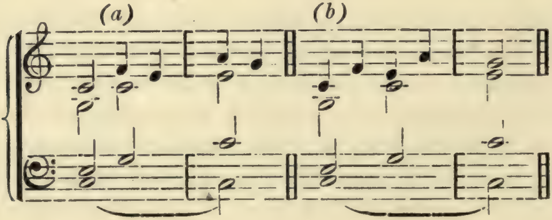


Further examples of free turning notes are illustrated at *g*, where the lower auxiliary of the succeeding consonant note is introduced; at *h*, where the same note is employed to form an ornamental resolution in connection with a suspension; at *i*, where the upper auxiliary of the succeeding consonant note is introduced; and at *j*, where the employment of the auxiliary note is the converse of that at *b*. The treatment of the auxiliary note at *j*, it may be said, is of rare occurrence; this progression may be compared with that at *c*, § 123.

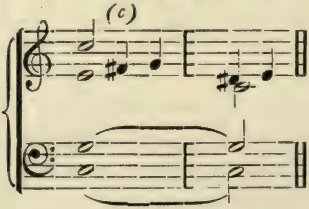


192. Auxiliary notes are frequently approached disjunctly, but, with the exception of the changing and the free turning note, they are rarely *quitted* disjunctly. When so approached, except in the case of the second of two changing notes, an auxiliary note is called an **Appoggiatura**, (It. *appoggiare*, to lean upon). Appoggiaturas, like passing notes, may be either accented or unaccented, and either diatonic or chromatic. If the lower auxiliary is employed, it is usually a *semitone* below the consonant note, except in the case of the third of a major common chord, when it may be either a tone or a semitone. Unaccented appoggiaturas of very short duration are often written as 'grace notes,' especially in instrumental music; they are then called **Acciaccaturas** (It. *acciaccare*, to crush).

Accented appoggiaturas are exemplified at *a*, and unaccented at *b*, in connection with the chord of C.



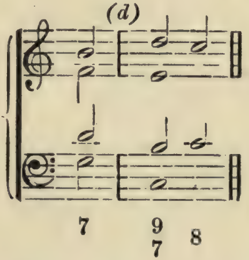
At *c*, *chromatic* appoggiaturas are exemplified, and although E is the major third of the chord, yet D natural would not be correct in this case, for the reason given in § 181.



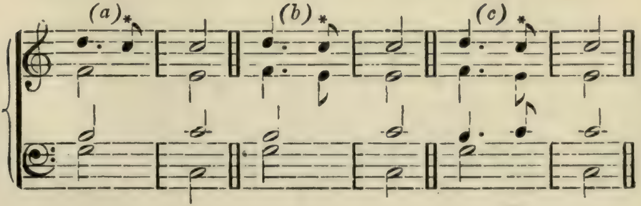
The use of chromatic appoggiaturas frequently necessitates the skip of an augmented interval; such skips are of common occurrence in instrumental music, but they are rarely employed in vocal music.

The student will do well to avoid altogether such skips for the present, and to employ appoggiaturas, especially when chromatic, in the treble part alone.

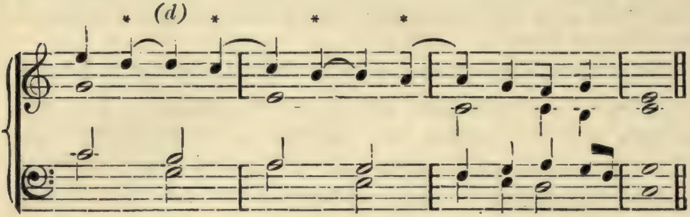
Double appoggiaturas, of which the six-four at *d*, § 69, is an example, are often employed in connection with the perfect cadence, as at *d*; these are sometimes, though incorrectly, called unprepared suspensions. It will be seen that instead of a double suspension, which might have been employed in this example, the dissonant note in each case is transferred to another part.

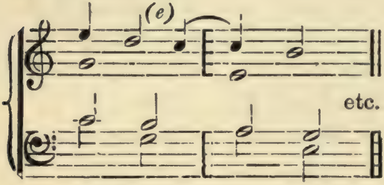


193. An **Anticipation** is the name given to a dissonant note introduced into one chord and immediately preceding the same note, as a consonant note, in the succeeding chord. An anticipation is frequently used in the perfect cadence, as at *a*; and sometimes double and triple anticipations are employed, as at *b* and *c*.



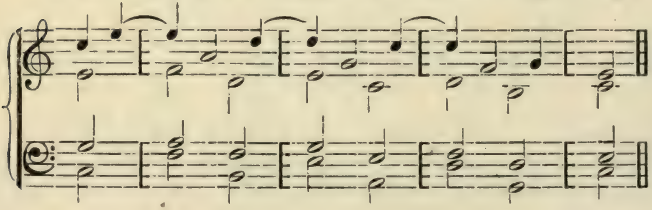
Anticipations may be written, as at *d*, or the syncopations may be omitted, and the passage written as at *e*. When thus employed, the anticipation may be said to be the converse of a suspension.





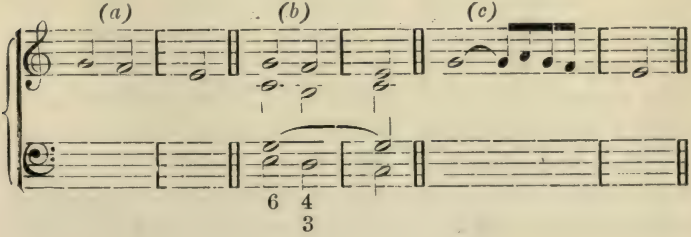
194. A **Retardation** is the name given to a dissonant note introduced into a chord by being sustained or held over from one chord to which it belongs into another to which it does not belong; in this respect it resembles a suspension; it differs, however, from a suspension in the manner in which it proceeds. A retardation moves *disjunctly*, whereas the movement in a suspension is always conjunct. Retardations are sometimes called 'driving notes,' and sometimes 'lagging notes,' names with practically opposite meanings, and yet both more or less characteristic of this form of discord.

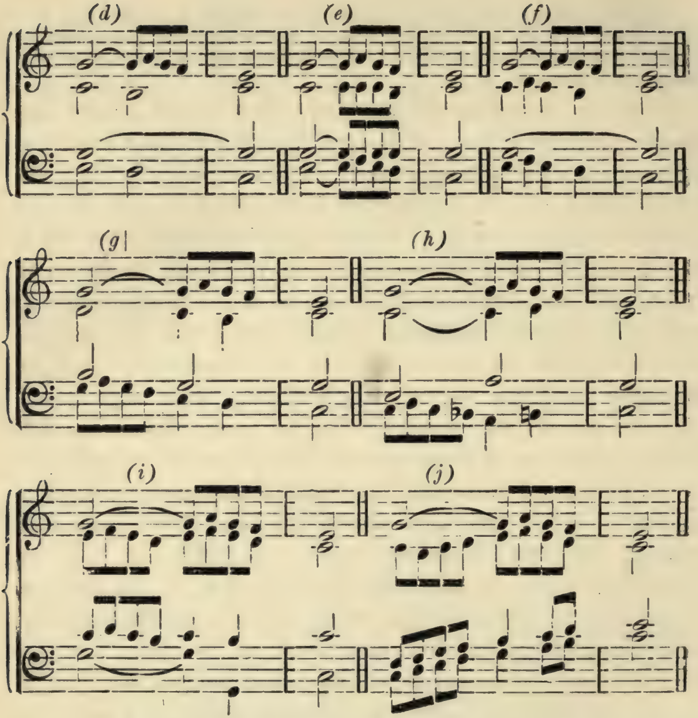
Retardations are exemplified in the following passage.



Retardations, it may be said, are not of frequent occurrence, and the student will do well for the present to avoid their use as far as possible; anticipations, on the other hand, may be employed with comparative freedom.

195. In harmonizing melodies which contain what are apparent auxiliary notes, it is often possible to treat even the simplest diatonic passages in a variety of ways. Thus, the melodic fragment at *a*, which is harmonized in perhaps the most natural manner at *b*, might appear in the varied form shown at *c*, the same harmonies being employed, as shown at *d*; but to harmonize the fragment as at *e*, though possible, would not, generally speaking, be good, the three short eighth-note chords on the second part of the measure not being in uniformity with the immediately preceding long syncopated half-note chord; the passage will be far more effective as at *f*, where double turning notes are introduced on the second beat for the purpose of imparting continuity of movement. Another treatment of this passage is shown at *g*, where the eighth-note figure in the bass *anticipates* that in the treble, or, in other words, the figure in the treble *imitates* that in the bass; a similar effect of imitation is shown at *h*; here a passing modulation is made to the key of F, and the G on the third beat (in the treble) may be regarded as being ornamentally deferred in resolution. At *i*, the sustained G is harmonized as a cadential six-four, the inner parts being varied by the addition of auxiliary notes; and at *j*, the G is treated as an inverted pedal note (§ 203), passing chords of sixth being employed in the lower parts.





196. In the employment of the auxiliary notes which have so far been considered, it is of primary importance to remember that they should be introduced with a certain degree of regularity. To employ several of such ornaments in quick succession for a few measures, and then not to employ any at all for two or three beats, would probably result in a spasmodic and very inartistic effect. No actual rules can be laid down in this connection. Good taste, inborn in some musicians and acquired by others, can be the only guide. In common time, unaccented auxiliary notes may most naturally be introduced between the second and third beats and between the fourth and first beats, and when thus employed, and not

otherwise, as a general rule, they may also be employed between the first and second, and between the third and fourth beats. The old ballad melodies frequently furnish excellent illustrations of the effective employment of auxiliary notes, especially passing notes, and an examination of a few of these airs and other secular tunes should be of much advantage in the study of this subject.

SUMMARY.

§ 179. Auxiliary notes generally.
Employed chiefly for the purpose of ornament.

§ 180. Turning notes (the upper auxiliary).

§ 181. Turning notes (the lower auxiliary).

§ 182. The turn.

§ 183. Compound turning notes.

§ 184. Changing notes.
Proceeding from the upper to the lower auxiliary, or vice versa.

§ 185. Passing notes.
The most important form of discord by transition.

§ 186. Incorrect use of passing notes.

§ 187. Passing notes in the minor mode.
The melodic form of the scale is freely employed in order to avoid the interval of the augmented second.

§ 188. Compound passing notes.
These occasionally result in fortuitous chords.

§ 189. Example illustrating the use of discords by transition.

§ 190. Chromatic passing notes.

§ 191. Free (or disjunct) turning notes.
Employed ornamentally between two notes a second apart.

§ 192. The Appoggiatura.

§ 193. The Anticipation.

§ 194. The Retardation.

§ 195. The treatment of auxiliary notes in melodies.

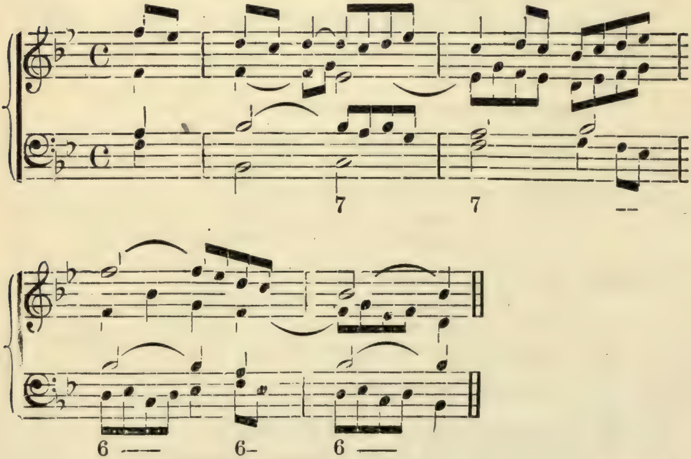
The simplest diatonic passages may often be harmonized in a variety of ways.

§ 196. On the employment of auxiliary notes in composition.

EXERCISES.

I.

1. Mark, employing the letters, t, c and p, the turning, changing and passing notes in the following passage.



2. Re-write the treble of the following passages, and introduce auxiliary notes of various kinds; each example may be worked in several different ways.

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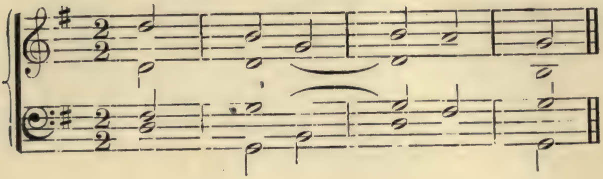

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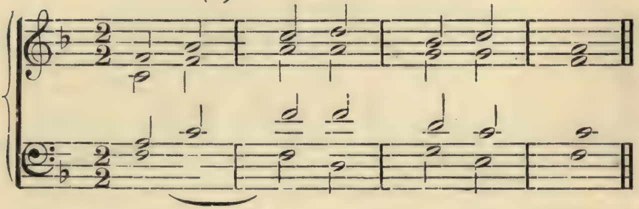

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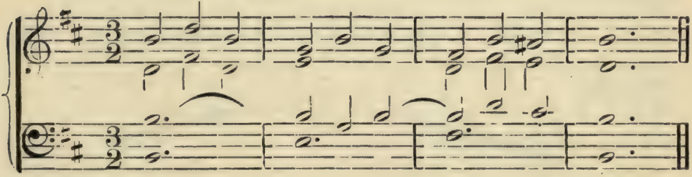
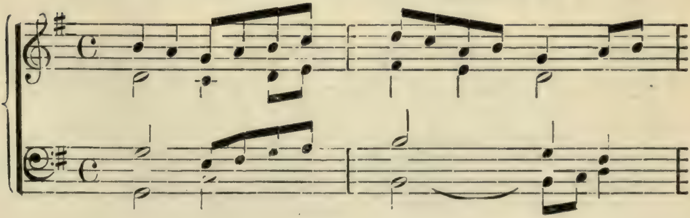
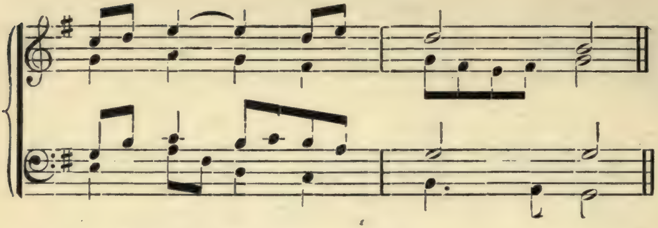
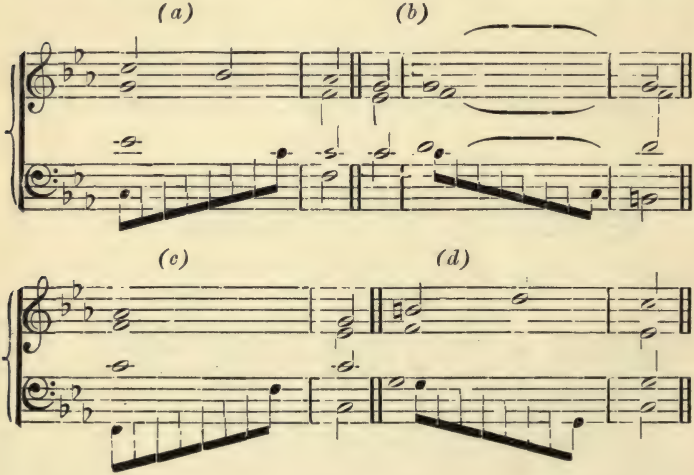


3. Describe the errors in the following passage.

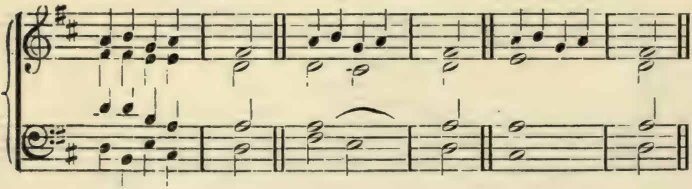




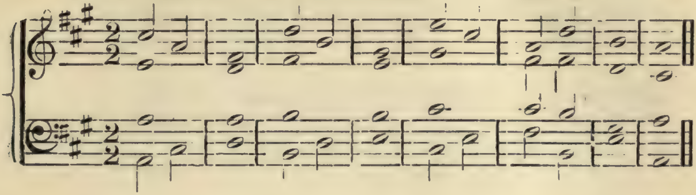
4. Complete the scale passages in the following example, employing the melodic form of the scale of C minor in each case.



5. Compare and explain the treatment of the notes in the treble in the following examples.

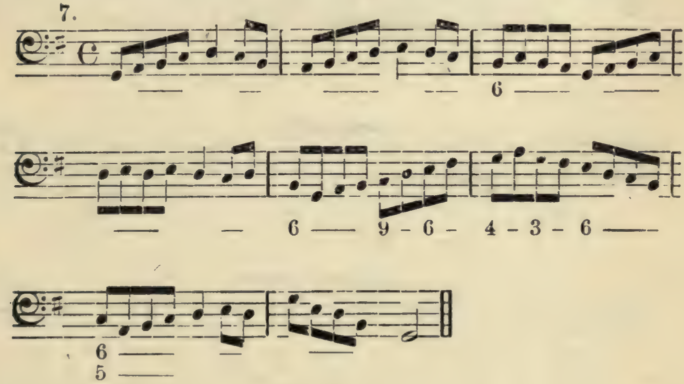


6. Re-write the following exercise, introducing passing and turning notes in all parts.



Add treble, alto and tenor parts to the following basses.

7.



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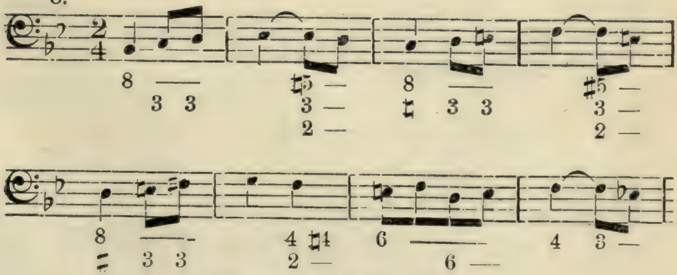

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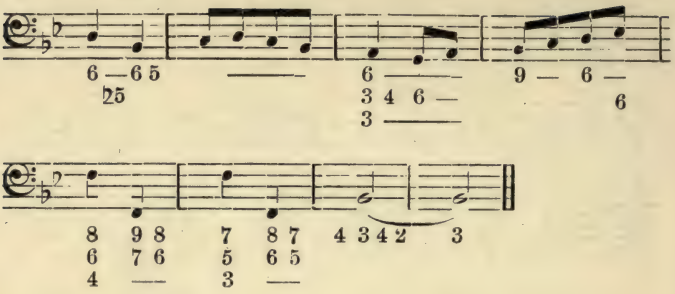

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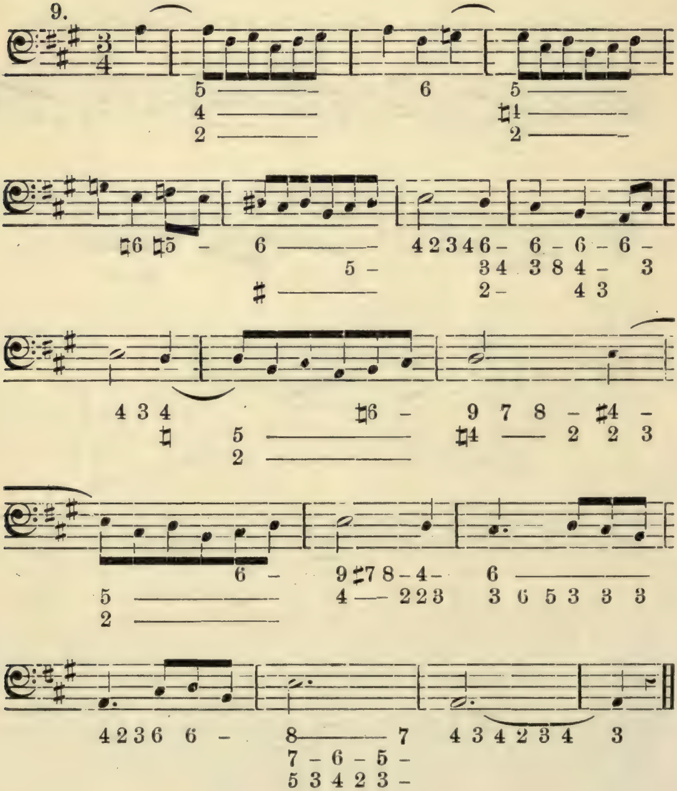

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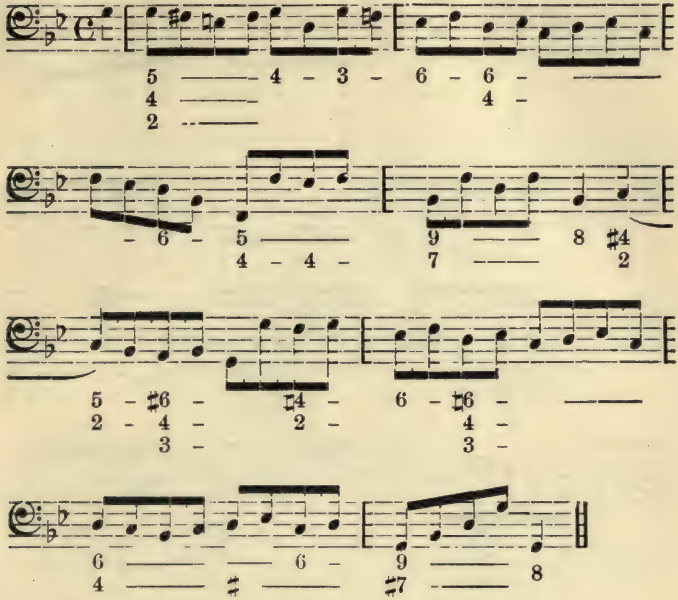
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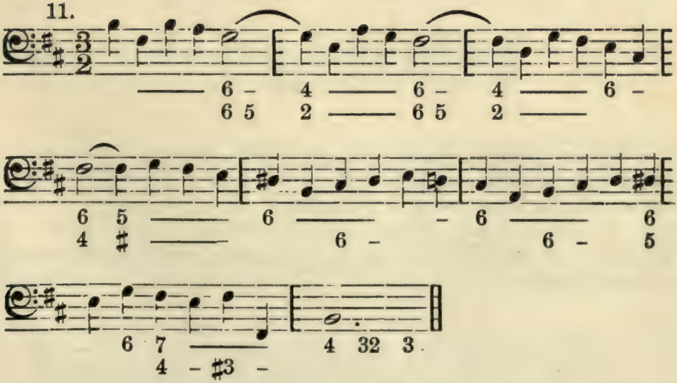
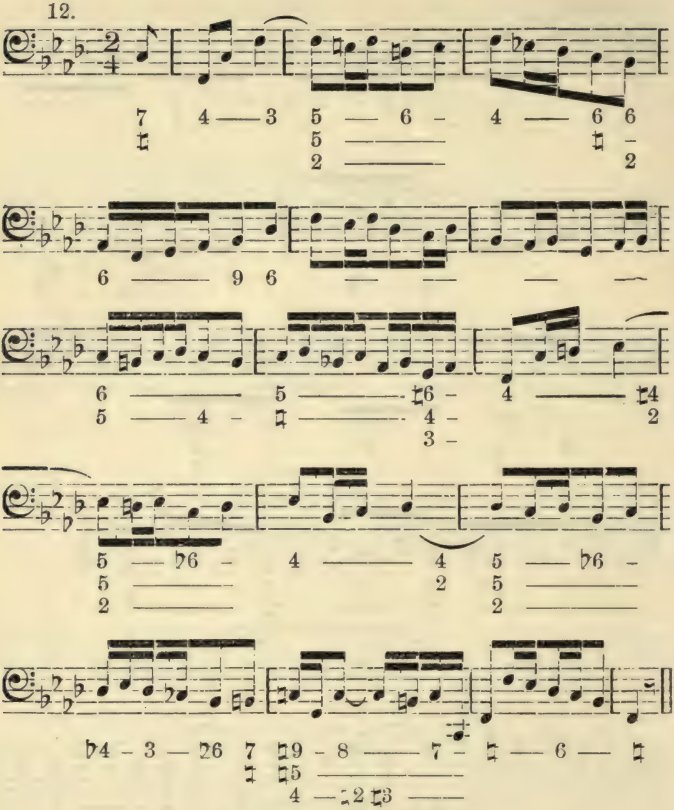
6 5 4 4 9 7 8 ♯4 2
5 2 ♯6 4 3 ♮4 2 6 ♮6 4 3
6 4 ♯ 6 9 ♯7 8

11.


6 6 5 4 2 6 6 5 4 2 6
6 4 5 ♯ 6 6 6 6 6 5
6 7 4 ♯3 4 32 3

12.



For the purpose of practice, the above figured basses may be transposed to other keys, *e, g,* a second (major or minor) above or below, and in some cases a third (major or minor) above or below. The Exercises should occasionally be worked in open score. By omitting the figures, advanced students may work the exercises as unfigured basses.

II.

Harmonize the following unfigured basses and melodies, introducing auxiliary notes (chiefly passing notes), suspensions and fundamental discords.

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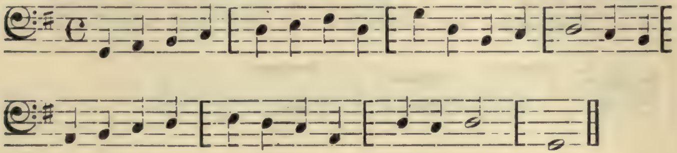

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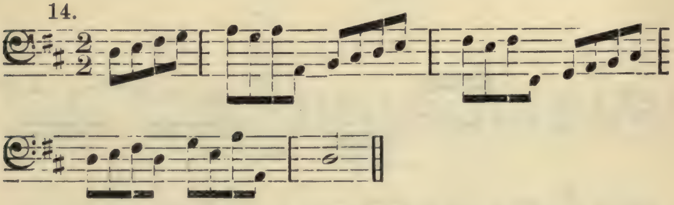
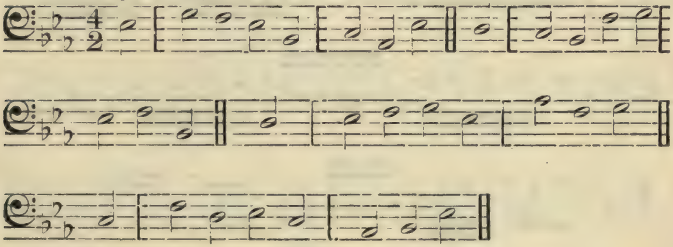


15. Hymn tune. L.M.



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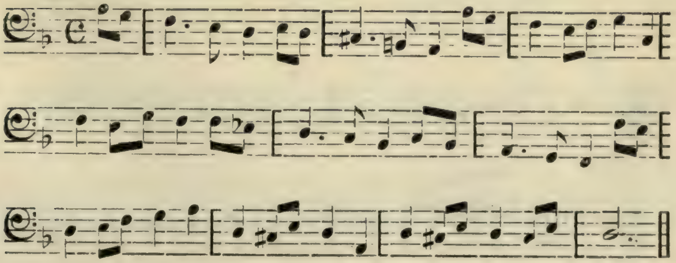

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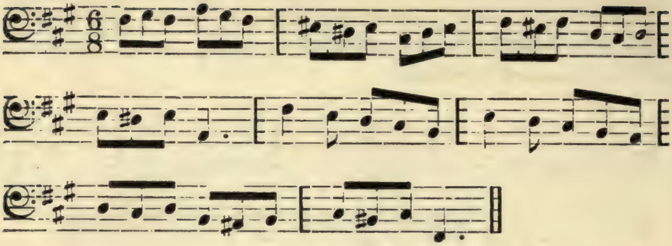

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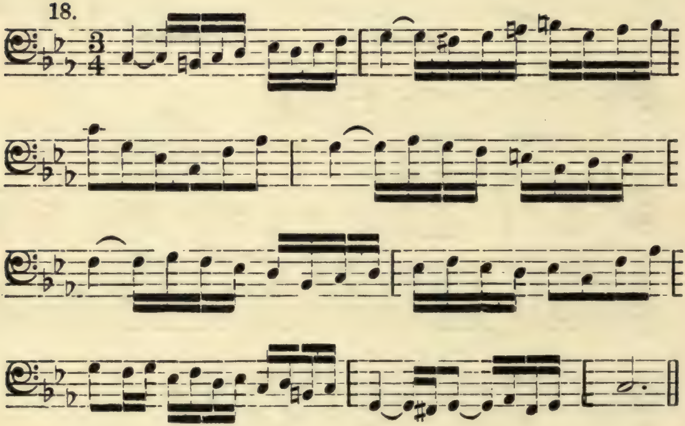

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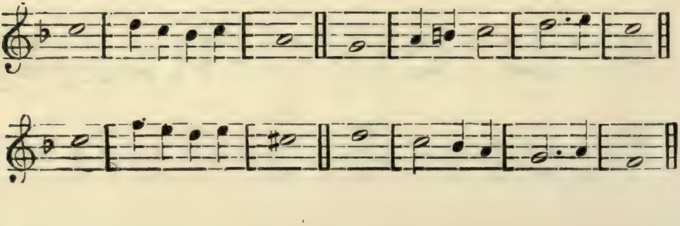

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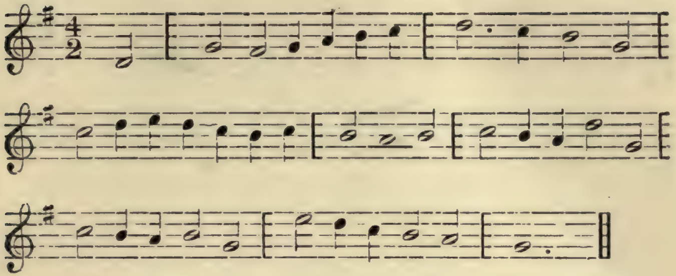

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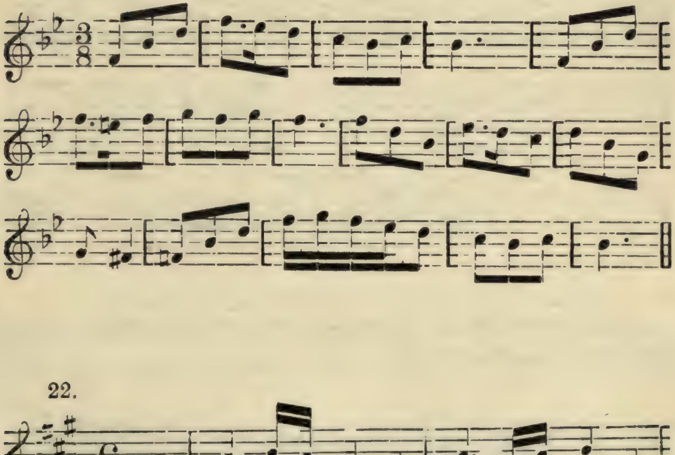

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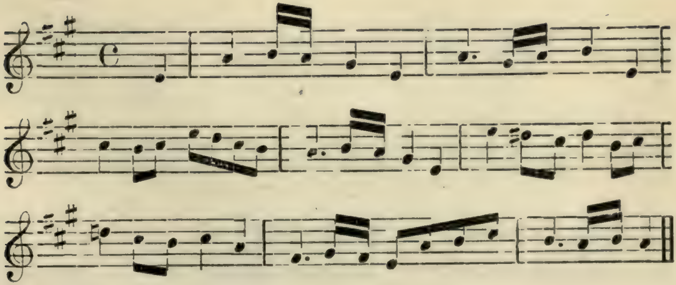

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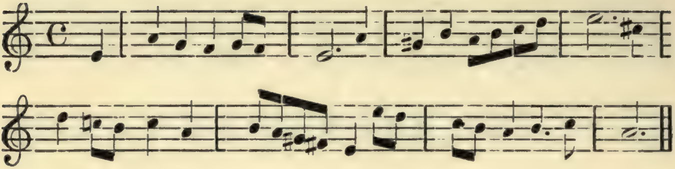

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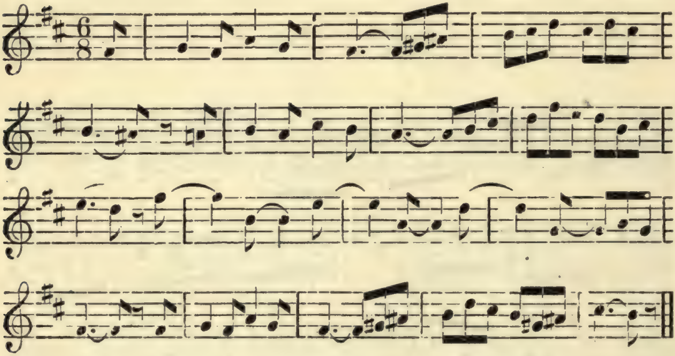
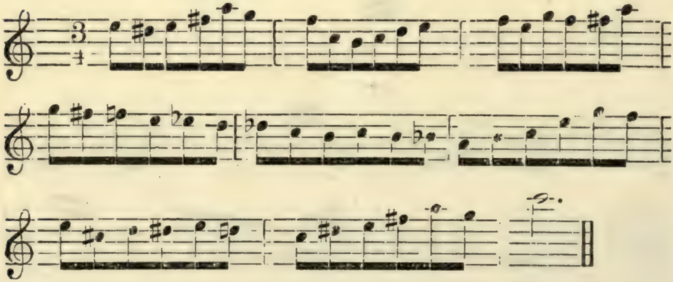
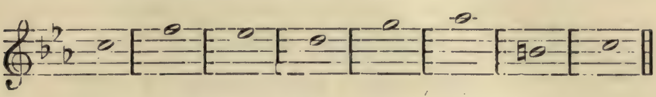


25. Harmonize the following florid melody, employing one chord only in each measure.

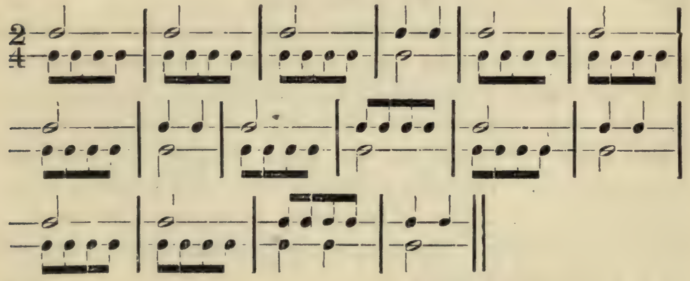


26. Convert the following passage into an interesting melody by the use of auxiliary notes, and then harmonize the same.



27. Write a short tonal sequence in the key of E, the model to consist of four chords and to include at least one passing (or turning) note between the beats.

28. Clothe the following blank rhythm with harmony, the upper line to represent the treble and the lower line the bass.



29. Compose a long metre hymn tune, (see Ex. 15) in the key of D flat, employing only common chords and their inversions, and introducing unessential discords continuously throughout.

30. Write a passage in the key of G sharp minor, in 6-8 time, introducing examples of all the discords which have so far been considered.

CHAPTER XVIII.

EXTRANEOUS MODULATION.

197. In natural modulation, the new key is invariably one of the attendant keys (§ 54). The attendant keys are also called keys of *first relationship*, in order to distinguish them from certain other keys, known as keys of *second relationship.* Keys which have no relationship to a given key are said to be *foreign* to it. Both second relationship and foreign keys are included under the name of extraneous keys (§ 99).

The keys in **second relationship** with a given *major* key are the major keys on the major and minor mediant and on the major and minor submediant, together with the minor keys on the tonic and subdominant. The keys in second relationship with a given *minor* key are the major keys on the tonic and dominant only. The keys in second relationship with C major, therefore, are E major, E flat major, A major, A flat major, C minor and F minor. Those in second relationship with C minor are C major and G major.

198. **Gradual modulation** from a given major key to any *extraneous* major key may, with one exception, be effected by employing the following four chords :—

a. The original tonic.
b. An intermediate chord.
c. The new V7, which is often inverted.
d. The new tonic.

The intermediate chord is usually a minor triad, the *root* and *fifth* of which are common to both keys.

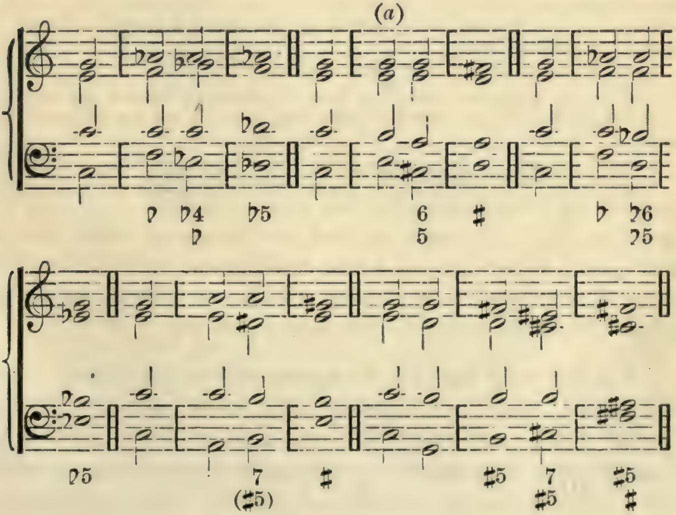
In gradual modulation from a given minor key, it is often desirable to introduce after the original tonic either V+ or VI+, and then regarding this chord as a new tonic, the chord at *b* may be employed, followed by the new V7 and then the new tonic.

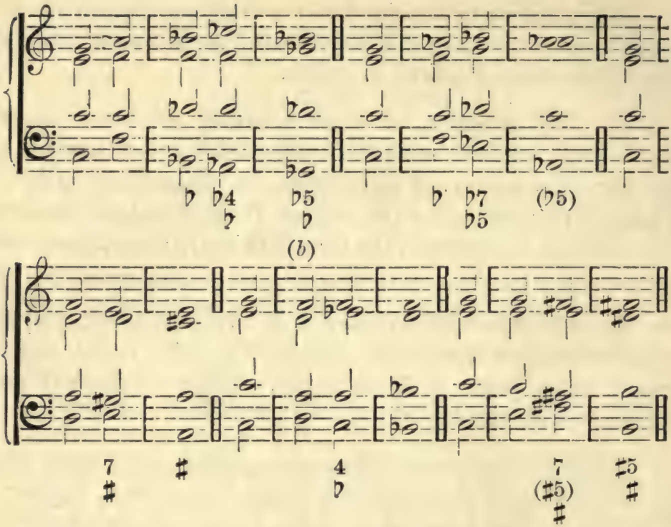
In proceeding to a minor key, the same chords may be employed as in proceeding to a major, with the exception that the final chord must, of course, be minor.

The one exception, to which reference was made above, occurs when the new tonic is an augmented fourth or diminished fifth above (or below) the given tonic; in this case, either IV or V may be employed after the original tonic, and then regarding this chord as a new tonic, the chord at *b* may be employed, and so on.

In gradual modulation there must be no chromatic changes whatever, but the enharmonic change of an entire chord, such as from F sharp major to G flat major, is often necessary in proceeding to a distant key.

The following example illustrates gradual modulation from the key of C to all the extraneous major keys. At *a*, V, instead of III, might have been taken as the ambiguous chord; and at *b*, IV, instead of II, might have been so employed.





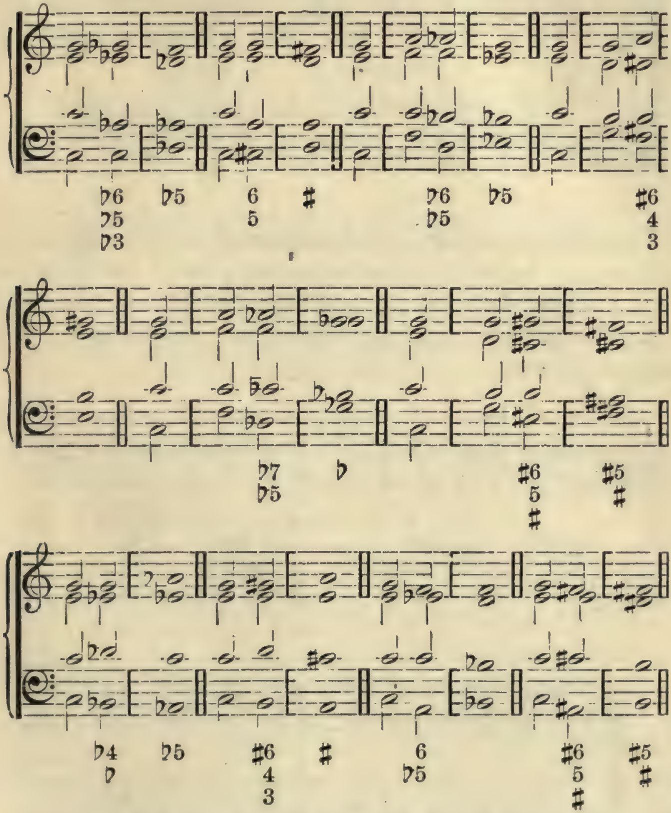
The student should commit the above example to memory, and should especially notice the relationship between the chord of C and the intermediate chord in each case. The intermediate chord may perhaps be the better remembered by the use of a symbolic formula, such as the following :—

When I is 2– employ IV–,

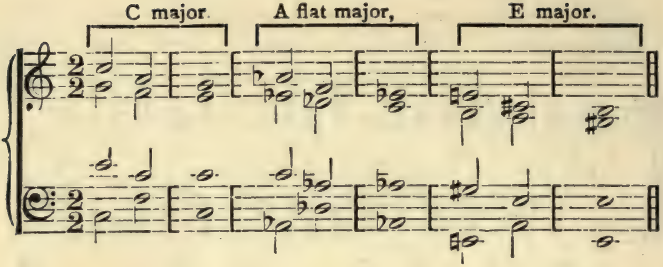
that is to say, when the new tonic is a minor second (above the original tonic) employ a minor chord on the subdominant (as the intermediate chord).

199. **Sudden modulation** to an extraneous key may be effected by proceeding from the original tonic to the new V7 immediately, if the roots of the two chords are *more than a tone apart*; if the roots are a tone or semitone apart, then either IV or V, whichever is the more convenient, may be employed (after the original tonic) to precede the new V7.

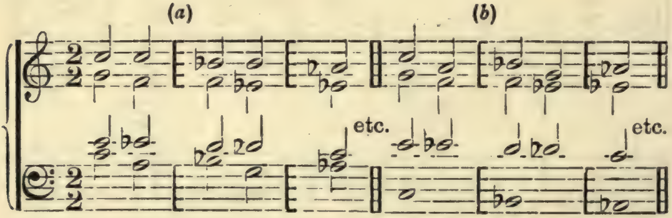
The following example illustrates sudden modulation from the key of C to all the extraneous major keys. In proceeding to the new V7, it will be seen that one or more parts move *chromatically*, and that one or more parts remain *stationary*, while the other parts move *as smoothly as possible.* The enharmonic change of an entire chord is sometimes necessary in proceeding to a distant key.

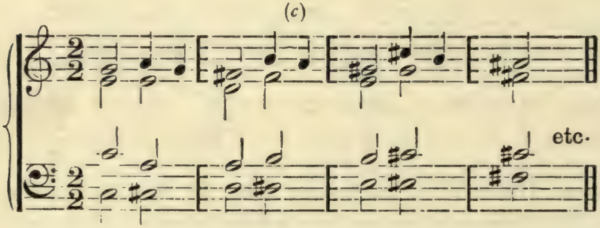


200. **Transition**, or *passing into the new key without the use of the dominant chord*, or of any chord derived from the dominant, is exemplified in the following passage. The enharmonic change to the key of E is here necessary in order to avoid the key of F flat, a key not recognized in music. Changes of key by transition almost invariably occur in connection with keys of second relationship.



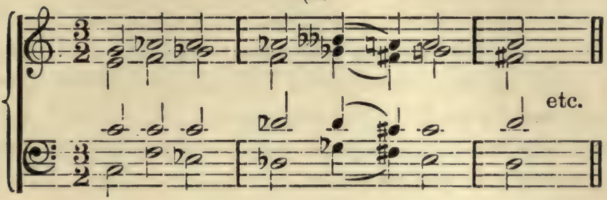
201. Many interesting real **sequences** may be formed by modulation. In the following examples, *a* and *b* are variations of the dominant sequence; *c* is a rising sequence, and *d* and *e* are founded respectively upon the first and last modulations in the example in § 198.



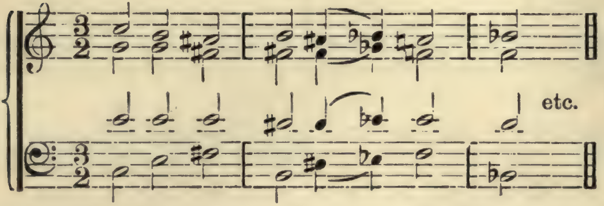


The enharmonic changes in the following examples are rendered necessary in order to avoid keys with more than seven sharps or flats; such changes must not be regarded as enharmonic modulation, a subject to which reference has been made in Chapter XIV, but which will be considered in detail in Part III.

(*d*)



(*e*)

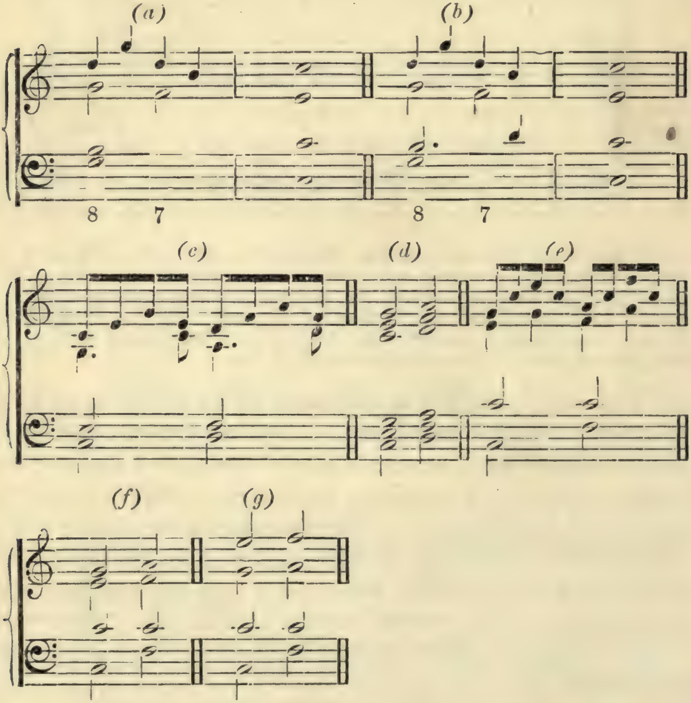


Modulations are occasionally effected by the use of V9, L7 and L70; the student, however, will do well to confine his attention to the use of V7, until he has mastered the various kinds of modulation which have so far been considered; and to employ other chords derived from V, only when he feels assured that they can be introduced with good effect in the place of the more conventional V7.

202. An **Arpeggio** is the name given to the notes of a chord when heard in succession. The term arpeggio is derived from the Italian *arpa*, a harp, on which instrument it is customary to play chords in this manner. Arpeggios are employed for the purpose of ornamentation, and since they have already been exemplified in §§ 69, 73, 83 and 91, it will be necessary now only to state the conditions under which they are employed, and these may be briefly summed up in the rule that a progression which is incorrect in itself is equally incorrect if converted into an arpeggio.

There are doubtless many exceptions to this rule in the works of the great masters, and especially in instrumental compositions, where arpeggios often of a very elaborate character are introduced; the student, however, should only employ arpeggios in accordance with the above rule, at least for the present.

The arpeggio in the treble at *a*, is incorrect, on account of the doubled L, and the consecutive octaves with the tenor; these faults are corrected at *b*.; at *c*, although there are no direct consecutives, yet the effect is very bad; this effect is represented at ***d***; at *e*, the effect is good, notwithstanding that a C is heard in the treble against the sustained C in the bass, followed, on the fourth beat, by an F in the treble against the sustained F in the bass; the effect of the passage may be represented by either the progression at *f*, or that at *g*.

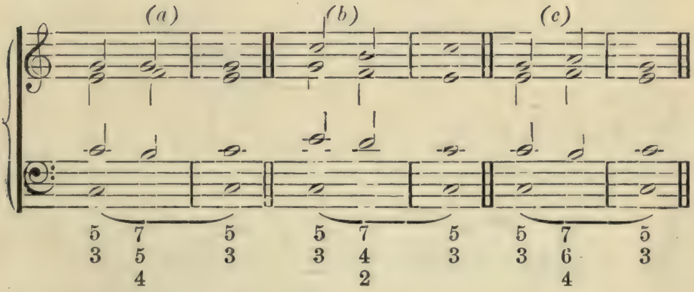


203. A **Pedal** (Lat. *pes*, a foot) is the name given to a note which is sustained through a succession of three or more chords. The term is also employed in reference to certain chords, and also in reference to the passage which is constructed upon or in connection with the sustained note.

The origin of the term 'pedal' is probably to be found in organ music, in which the bass of the harmony is usually played on the pedals, and in which pedal passages are of common occurrence ; such passages, indeed, are often called 'organ points,' the term 'point' indicating a note, as in counterpoint, which is a contraction of point-counter-point, that is to say, note-against-note.

Pedal notes most frequently occur in the bass, either I or V, and rarely any other note, being employed for this purpose. When occurring in any part other than the bass, the sustained note is called an *inverted* pedal. If two pedal passages are introduced into a composition, one on V and the other on I, that on I should appear last. Occasionally both V and I are employed simultaneously as a double pedal, in this case I must, of course, be placed below V. Pedal passages usually commence and almost invariably conclude with a chord of which the pedal note forms an essential part.

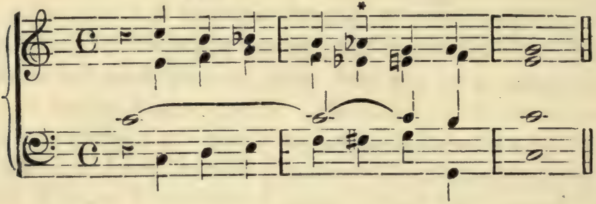
A pedal chord is the name given to a fundamental discord whose root (or generator) is the perfect fifth of the pedal note over which it occurs. The pedal chord at ***a***, is $V7^1$; at *b*, $V7^2$; and at *c*, L7.



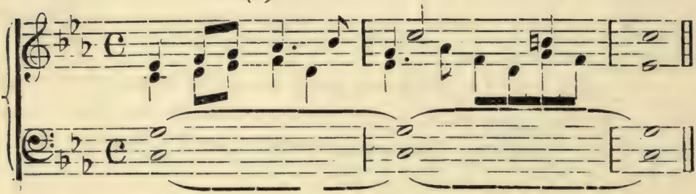
The chord at *b*, since V is omitted, may also be regarded as L^1, in which case it would be equally correct for the alto and tenor notes, instead of falling, to rise one degree. The significance of the term 'pedal six-four' will now be seen, for, with the exception of the tenor note, the chord at *c* is identical with that at *b*, in § 69. The above examples are equally available in the minor mode, but the chord at *c* would then be converted into L70.

An inverted pedal is exemplified at *d*, and a double pedal at *e*; the chord at * is an inversion of the German form of the augmented sixth, a chromatic chord which is explained in § 208.

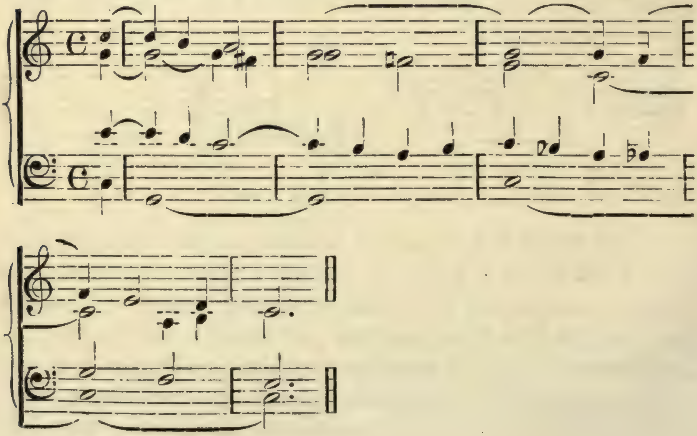
(*d*)



(*e*)



The following example illustrates a dominant pedal, followed by a tonic pedal, with a modulation over each.



204. When the pedal occurs in the bass, *the part immediately above the pedal* becomes for the time being the real bass, and must follow the rules which relate to bass progressions. If a pedal note is extended for several measures, it is often more convenient to figure this, usually the tenor part, instead of figuring the bass—the pedal. The chords employed in a pedal passage should as much as possible be confined to the key to which the pedal belongs; modulations to closely related keys are permissible, but in every case they should be transient.

A pedal note, instead of being sustained, may be continually repeated, either on successive beats or alternate beats, or by the use of syncopations between beats. These repetitions may also be varied by the use of auxiliary notes, while, especially in instrumental music, the pedal note often appears in the form of an extended shake; when thus treated it is called a *florid* pedal.

205. The constant use of the same auxiliary note or notes in connection with frequently employed harmonic progressions will give rise to certain chords, which, although introduced in the first instance as fortuitous chords, will in due course become independent and generally accepted chords. Such chords will be chromatic chords if one or more chromatic auxiliary notes are employed.

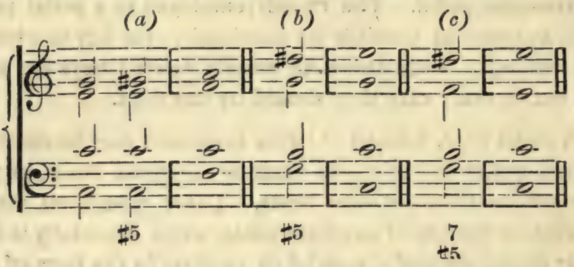
Although the chromatic element in harmony will be considered in detail in Part III of this work, yet it will be advisable to refer in the present chapter to a few of those chords, the origin of which is presumably due to the employment of chromatic auxiliary notes.

The chromatic chords in most frequent use are

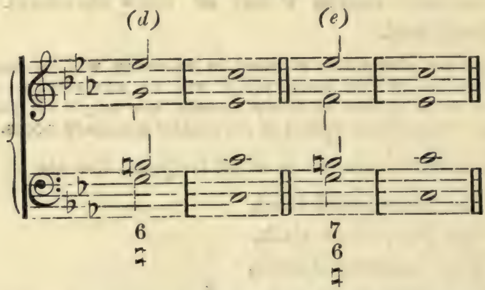
The Augmented triad,
The Neapolitan sixth,
The Augmented sixth,
The Primary seventh, and
The Diminished seventh.

Some of these chords, namely, the Augmented triad, the German sixth (a form of the augmented sixth), and the Diminished seventh play a very important part in enharmonic modulation, a subject which will also be considered in Part III.

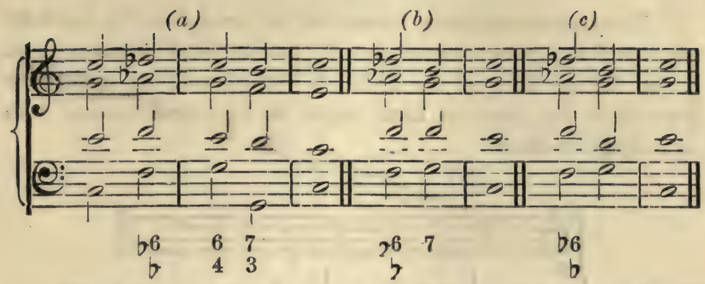
206. The **Augmented triad** usually occurs on I, as at *a*, and on V, as at *b*, in the major mode; and it is often employed in connection with V7, as at *c*; it is also found occasionally on IV of the major mode, but not on any other note, and not in the minor mode at all except in its normal position on III.



A chord having the appearance of being the first inversion of the augmented triad on III of the minor mode is shown at *d*; this, however, is an independent chord (the dominant minor sixth, V6–) and will be considered in due course (in Part III) under the heading of 'Modified chords.' It is frequently employed in conjunction with V7, as at *e*. The progressions at *d* and *e* should be compared with those *b* and *c*.



207. The **Neapolitan sixth** occurs on IV in both modes; it is chiefly employed as a pre-cadential chord, and usually proceeds to a cadential six-four as at *a*, or to V7 directly as at *b*, or, occasionally to V, as at *c*. These progressions are equally available in the minor mode.

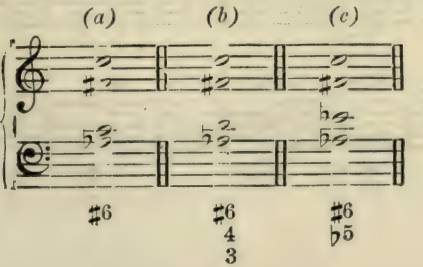


The false relation between the treble and tenor at *c* is not objectionable, as it does not suggest ambiguous tonality. The somewhat exceptional interval of a diminished third in the treble in this progression should not pass unnoticed. The perfect cadence, when preceded by the Neapolitan sixth, as at *b* and *c*, on account of the peculiar plaintive effect, is sometimes called the Pathetic cadence.

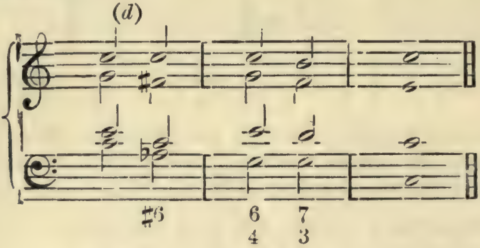
The best progressions to the Neapolitan sixth are from I and I^1, and possibly IV, in the major mode, and from the same chords, together with VI and possibly IIo^1, in the minor. The sixth in this chord is almost invariably the best treble note, and the bass should always be doubled.

The correct symbol for the Neapolitan sixth is $-II+^1$; but N6 may, if preferred, be employed instead.

208. The chord of the **Augmented sixth** most frequently occurs on −VI, the minor second above V, in both modes. It is found in three distinct forms, these are generally known as the Italian, the French and the German. These forms are respectively shown at *a*, *b* and *c*.



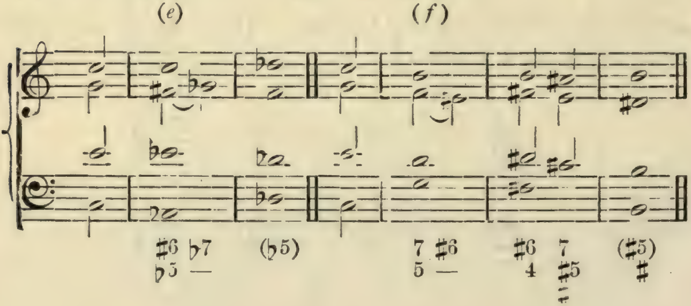
The augmented sixth, in each of its forms, like N6, is chiefly employed as a pre-cadential chord. In the following example, at *d*, the Italian form of the chord is introduced, but either the French or the German form might be employed instead with equally good effect.



The Italian and French forms may resolve upon V or (by chromatic resolution) on V7 directly; but if the German form is resolved in this way consecutive perfect fifths will arise.

The best progressions to the chord of the augmented sixth are from I, the bass skipping either up a minor sixth or down a major third, and from IV¹, when all parts may move conjunctly. The German form may also be approached from N6.

If, in the German form, the interval of the augmented sixth is enharmonically changed to a minor seventh, it will be seen that the chord is converted into V7 of that key of which N6 is I¹. This enharmonic modulation is exemplified at *e*. In like manner V7 may be converted into a German sixth, as at *f*.



Reference to enharmonic modulation has already been made in connection with the chord of the Diminished seventh; this subject will be considered in detail in Part III.

Any note of these chords may be effectively employed in the treble.

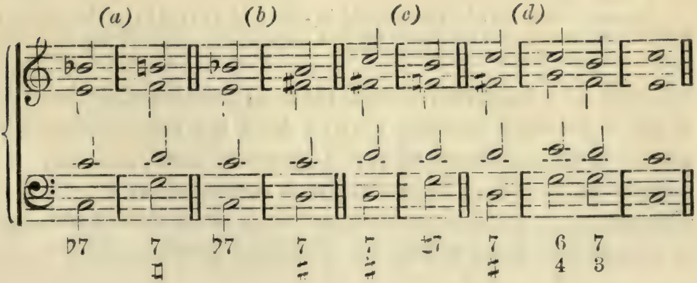
These chords are usually employed in their normal position, as shown at *a*, *b* and *c*; they are occasionally inverted; an example of the third inversion of the German sixth will be seen at *d*, § 203.

The correct symbols for these chords are, for the Italian, $-\mathrm{VI}6\times$; for the French, $-\mathrm{VI}{}^{6\times}_{4}$; and for the German, $-\mathrm{VI}{}^{6\times}_{5}$; but the following symbols may, if preferred, be employed instead, It6, Fr6 and Gn6, respectively.

Chords of the augmented sixth occur occasionally on other notes, such as −II, and IV, but these will be considered in a later chapter, suffice it for the present to add that in resolving these and all chords which contain chromatic notes, as a general rule, a chromatically raised note has a tendency to rise, while a chromatically lowered note has a tendency to fall.

209. **Primary sevenths**, as chromatic chords, usually occur on I and II, in both modes, and, though rarely employed, they are possible also on III, VI and L. Reference has been made to these chords in § 117, where it was shown that a primary seventh is identically the same as V7 in construction, but that it differs in resolution. Primary sevenths never induce a modulation.

The following are the most frequently employed resolutions of the primary seventh on I, at *a* and *b*, and of the primary seventh on II, at *c* and *d*.



The symbols for these chords are respectively I + 7- (or simply I7-) and II + 7.

II + 7 is frequently employed as a pre-cadential chord, and for this reason is the most important of all the chromatic primary sevenths.

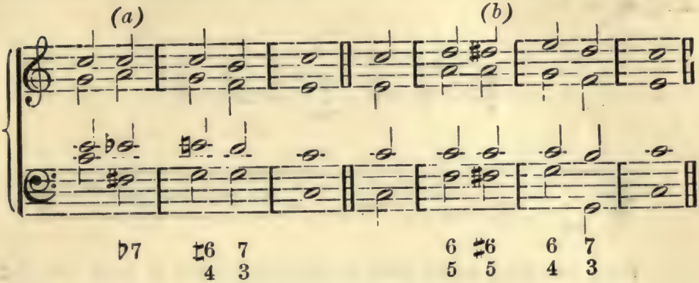
Primary sevenths are susceptible of inversion, and the second inversion, like $V7^2$, may be employed in its incomplete form, the root being omitted.

The best progressions to primary sevenths, on whatever degree of the scale they may occur, are from major or minor triads or their first inversions with the root movement a perfect fourth or fifth; roots falling a third or rising a second are also good. Thus, II + 7 may be approached from VI or V (the strongest progressions), from IV (with chromatic movement) or from I; and possibly from II-, with roots stationary.

210. When a ninth is added to a primary seventh the chord is converted into a **Primary ninth**, major or minor, as the case may be; and when the root of a primary ninth is omitted, a chromatic chord of the seventh remains, such a chord being termed a derivative of a primary ninth, just as L7 and L7o are derivatives of V9. The chord derived from a primary major ninth is called a chromatic minor seventh, and that derived from a primary minor ninth, a chromatic diminished seventh; in each case the fifth of the note upon which the seventh is formed is a diminished fifth, while the third is necessarily minor.

These chords will be considered in detail in Part III; in the present chapter reference will be made to one chromatic chord of the seventh only.

The most important of these fundamental chromatic discords is the diminished seventh, derived from the supertonic minor ninth. Like the chord of the Augmented sixth, it is very frequently employed as a pre-cadential chord, as at *a*, where it resolves upon a cadential six-four. It is often introduced as at *b*, where the E flat is written as D sharp; in this case the chord may be regarded either as 'a passing chord,' or as the diminished seventh, derived from the primary ninth on L, § 203.



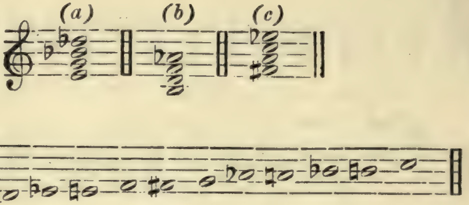
The progression at *a* is equally available in the minor mode. The notation of the chord at *b* would be incorrect in the key of C minor, for it is an inviolable rule that *no degree of the scale may be enharmonically changed* except for the purpose of modulating to an extraneous key.

The symbol for the chord at *a* is ×IV7o. The name usually given to this chord is 'the diminished seventh on the chromatically (or, accidentally) raised subdominant'; in the present work it will be called 'the diminished seventh on the interdominant,' the term 'interdominant' being employed as a technical name for the chromatic note which occurs *between* the subdominant and the dominant. It has already been stated (§ 31) that this note, ×IV, like the subtonic, VII, is never enharmonically changed (without effecting a modulation), and that these notes are called perfect chromatics in order to distinguish them from the other chromatic notes of the key, -II, -III, -IV, which *may* be enharmonically changed to ×I, ×II and ×V, respectively.

The symbol for the diminished seventh derived from the primary ninth on I, is III7o.

211. In concluding this brief reference to the more important chromatic chords—more important only because more frequently employed—it is interesting to note that the three diminished sevenths, *a*, III7o (generator I), *b*, L7o (generator

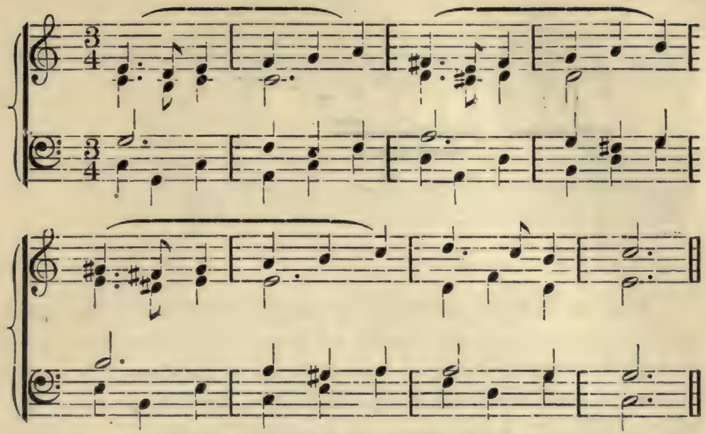
V, the fifth of I) and *c*, × IV70 (generator II, the fifth of V) comprise all the notes of the harmonic form of the chromatic scale, *d*, (§ 29).



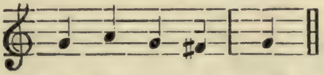
212. Auxiliary notes play an important part in both real and tonal sequences; innumerable variations indeed may be formed from even the simplest progressions of common chords, while the dominant sequence in particular lends itself to a practically inexhaustible variety of treatments. It would be superfluous, after the copious illustrations of the use of auxiliary notes which have already been given, to exemplify them further in connection with ordinary sequences, but reference may here be made to the **Rosalia**, the name given to a passage in which a certain figure is repeated several times, being transposed usually one degree higher in each repetition.

The term 'Rosalia' originated from an Italian folk-song entitled 'Rosalia mia cara,' which was constructed upon this principle of repetition. In Germany such a passage is called a 'Vetter Michel,' a term which also originated from a song of similar construction. Too much repetition in musical compositions evinces a lack of inventive power on the part of the composer, these terms, therefore, (and especially the latter) are frequently used with a somewhat derisive significance.

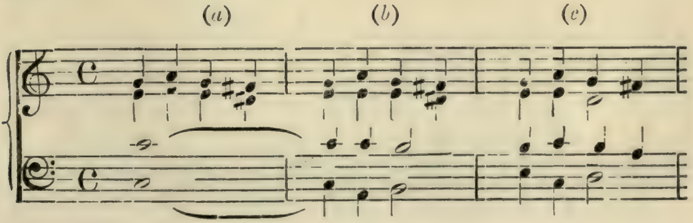
The following passage illustrates a Rosalia. In no case, it may be said, should the model be repeated more than twice, unless indeed an effect verging on the ludicrous is especially desired. It will be seen in the present instance that whereas the first repetition is an exact *transposition* of the model into the key of the dominant, the second repetition is a *transcription* (rather than a transposition) of the same into the key of the relative minor.

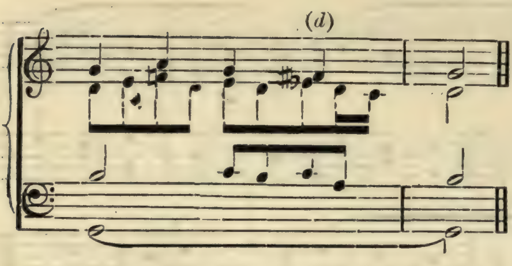


213. When an accidentally changed note occurs in a melody or an unfigured bass it is necessary in the first place to consider its character, whether it is diatonic or chromatic, and if the latter, whether it is an auxiliary note or whether it forms part of a chromatic chord. Such a note may often be treated in a variety of ways, thus, the F sharp in the following melodic fragment



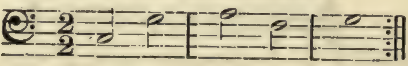
may be regarded, *a*, as a chromatic turning note; *b*, as II in E minor; *c*, as L in G major; or *d*, as the (nominal) root of L70 in the key of G. These various treatments of the F sharp are exemplified in the following passage, where the above fragment is repeated continuously in the treble. The G in the bass at *d* is a pedal.



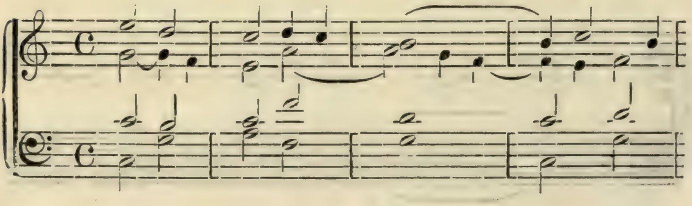


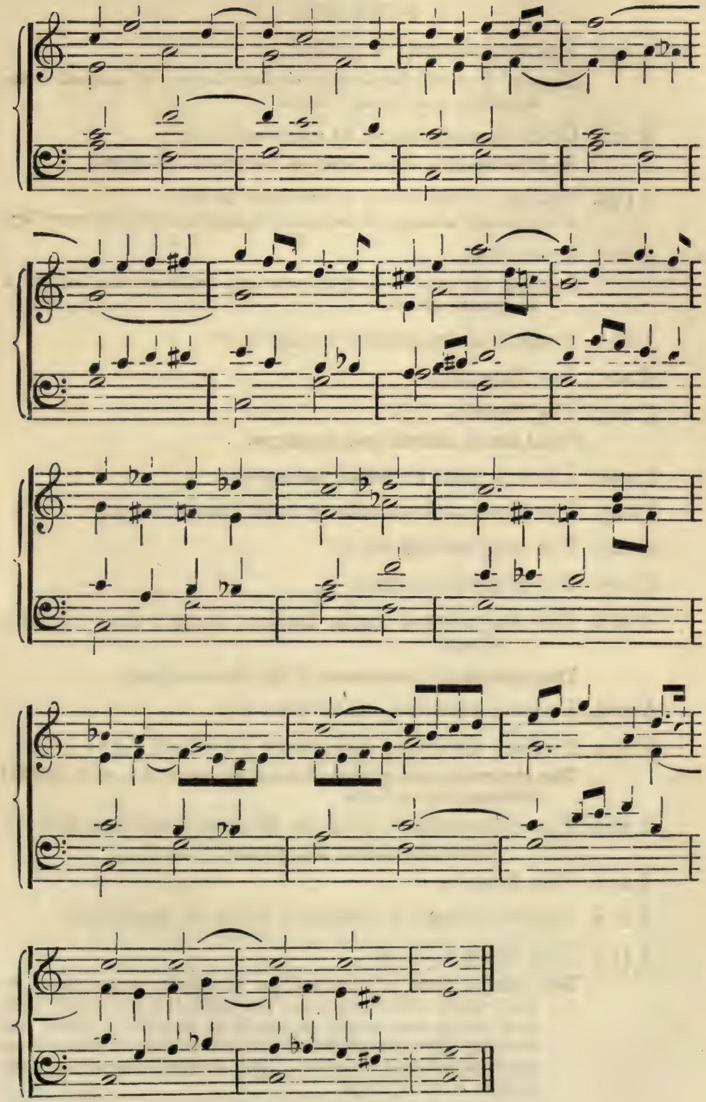
214. A **Ground bass** (or simply, a Ground) is the name given to a short passage, usually of from four to eight measures in length, which is repeated several times in the bass, the superimposed harmonies at each repetition being varied, either by the employment of suspensions or auxiliary notes, or, through changing the function of a bass-note, by the employment of an entirely different chord. In harmonizing a ground bass it is customary to conceal as completely as possible the point at which each repetition of the passage in the bass commences.

The three bar phrase



forms the basis upon which the following 'ground' is constructed. This phrase, it will be seen, is repeated five times (being heard six times in all), and as it ends on V, a Coda of three measures is added in order to form a satisfactory conclusion.





SUMMARY.

§ 197. Key relationship in general.

Keys of first relationship (attendant keys), of second relationship, and foreign keys.

§ 198. Gradual modulation to extraneous keys.

An intermediate chord and no chromatic changes.

§ 199. Sudden modulation to extraneous keys.

A chromatic change to be made in approaching the new V7.

§ 200. Transition.

Passing abruptly into the new key without the use of a dominant chord.

§ 201. Sequential extraneous modulation.

§ 202. The Arpeggio.

§ 203. The Pedal.

Pedal notes, chords and passages.

§ 204. The real bass in pedal passages.

§ 205. The Chromatic chords in most frequent use.

§ 206. The Augmented triad.

§ 207. The Neapolitan sixth.

§ 208. The Augmented sixth, Italian, French and German forms.

The enharmonic treatment of the German sixth.

§ 209. Primary sevenths, other than V7.

§ 210. Primary sevenths, other than V9+ and V9−.

The chromatic minor and diminished sevenths, with special reference to ×IV7o.

§ 211. The Harmonic form of the chromatic scale as derived from chords of the primary ninth.

§ 212. The Rosalia.

§ 213. The treatment of chromatic notes in melodies.

§ 214. The Ground Bass.

This simple form of composition should be constructed so as to form one continuous passage, the point of repetition being concealed as much as possible; while the various harmonizations of the theme should possess an ever increasing interest. The Ground frequently concludes with a Coda.

EXERCISES.

I.

Write the following modulations, making no chromatic changes whatever, and employing as few chords as possible in each case.

1.	2.	3.
a. D to E flat.	*a.* F sharp to G.	*a.* D flat to D.
b. F to G.	*b.* D flat to E flat.	*b.* C flat to C sharp.
c. G to B flat.	*c.* C sharp to E.	*c.* A flat to B.
d. B flat to D.	*d.* G to B.	*d.* E to A flat.
e. E flat to A.	*e.* D to A flat.	*e.* B flat to E.
f. A to F.	*f.* F to D flat.	*f.* E flat to B.
g. A flat to F.	*g.* A to F sharp.	*g.* E to D flat.
h. E to D,	*h.* D flat to C flat.	*h.* A flat to F sharp.
i. B flat to A.	*i.* G flat to F.	*i.* B to B flat.

No enharmonic changes will be necessary in making the above modulations, except in question 3.

4. 5. 6. Reverse the order of the keys at *a*, *b*, *c*, etc., in questions 1, 2 and 3 respectively, and then connect them by ***sudden*** modulation, in each case making one or more chromatic changes, and enharmonic changes also when necessary.

7. Modulate gradually to the key of C major from the following minor keys: (*a*) B, (*b*) F sharp, (*c*) C sharp, (*d*) G sharp, (*e*) G, (*f*) B flat, (*g*) E flat.

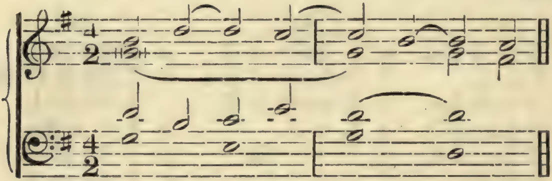
8. Connect the following minor keys by sudden modulation: (*a*) E and F, (*b*) D and E, (*c*) B and D, (*d*) D and F sharp, (*e*) (F) and (B), (*f*) E and C, (*g*) B flat and G, (*h*) C sharp and B (*i*) G sharp and G.

9. Write a phrase of four measures commencing and ending (with a perfect cadence) in the key of B flat, introducing a sudden modulation to one of the major keys in second relationship, and returning therefrom by gradual modulation.

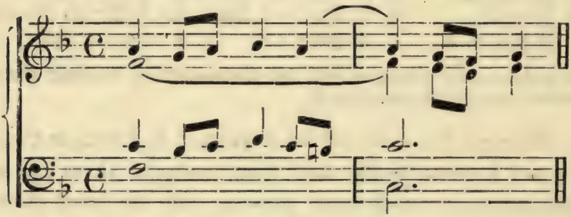
10. Modulate from B minor to B major and back to B minor, and then to F sharp major and back again to B minor, one continuous passage, and conclude with a plagal cadence.

Continue the following passages, maintaining the style as far as possible and introducing the modulations to and through the keys as indicated, in each case returning to and concluding in the original tonic key.

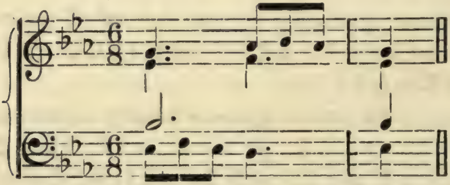
11. B +, D +, and B flat – (about eight measures).



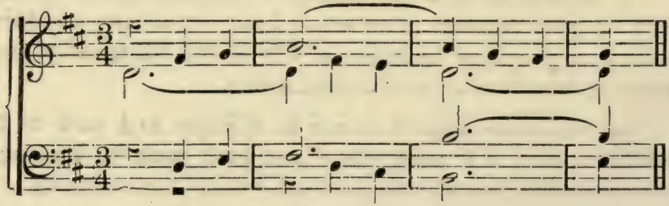
12. A flat +, D – and F sharp + (about eight measures).



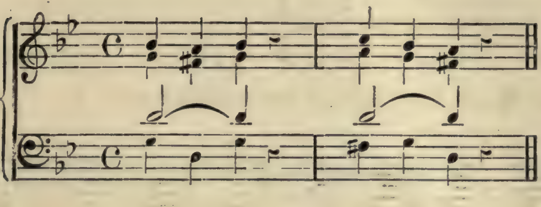
13. B +, F –, E + and C – (about twelve measures).



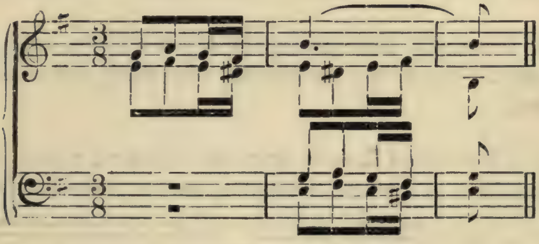
14. C sharp +, F +, G flat +, B – and G – (about sixteen measures).



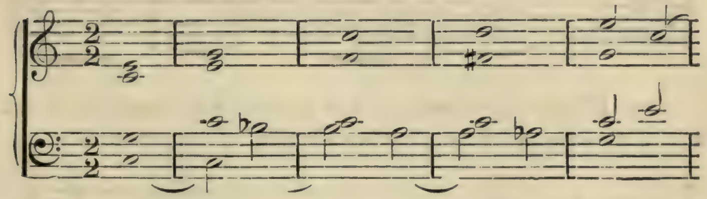
15. D +, B flat +, A – and A + (about twelve measures).

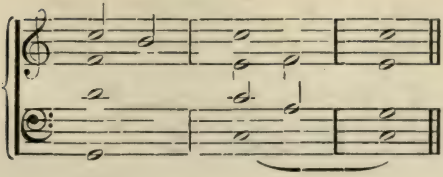


16. E +, E flat +, G +, F sharp – and G sharp – (about sixteen measures).



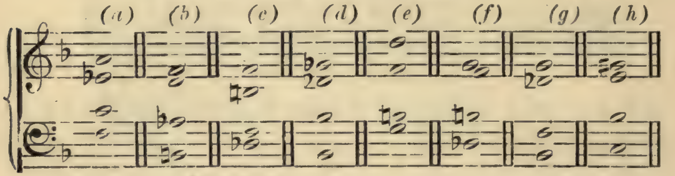
17. Re-write the following passage, introducing arpeggio movement of a simple character in the upper parts.





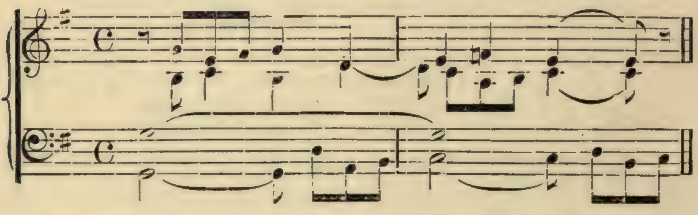
18. Exemplify (1) in the key of E, and (2) in the key of F minor, the pedal chords $\begin{smallmatrix}7\\5\\4\\2\end{smallmatrix}$ and $\begin{smallmatrix}7\\6\\4\\2\end{smallmatrix}$.

19. Name the following chromatic chords.

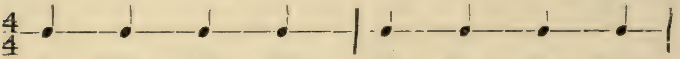


20. Introduce and resolve the above chords, employing in each case not more than six chords, beginning and ending with the tonic.

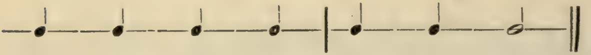
21. Construct a Rosalia from the following model, and add a few measures as a coda, concluding with a perfect cadence.



22. Clothe the following blank rhythm with harmony in the key of G, employing the chords indicated by the symbols

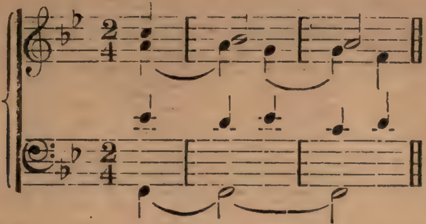


I $\mathrm{III}7o^{3}$ IV^{1} $-\mathrm{VI}{}^{6\times}_{4}$ (Fr6) I^{2} $\mathrm{L}7o^{2}$ $\mathrm{I}7^{-1}$ $-\mathrm{II}+^{1}$ (N6)



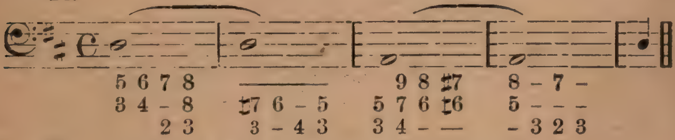
V7 –VI+ ×IV7o V I^{1} IV–6 I

23. Continue the following sequence (on a dominant pedal), conclude with a perfect cadence, and figure the bass throughout.



Add treble, alto and tenor parts to the following pedal passages. The tenor must be a correct bass to the upper parts.

24.



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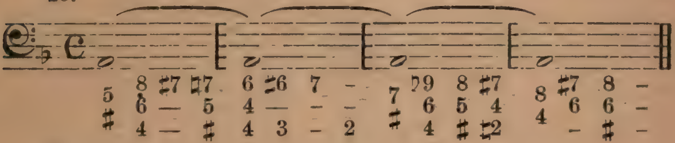
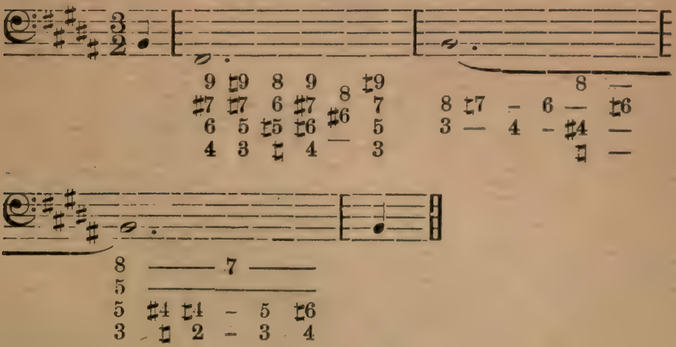
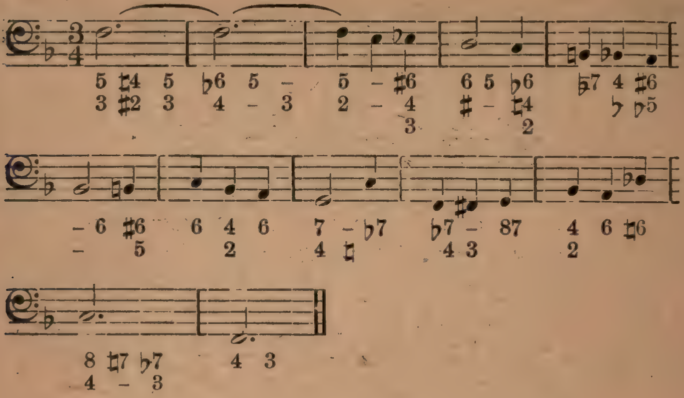


26. Add four upper parts—first and second treble, alto and tenor—to the following pedal passage.



Add treble, alto and tenor parts to the following basses.

27.



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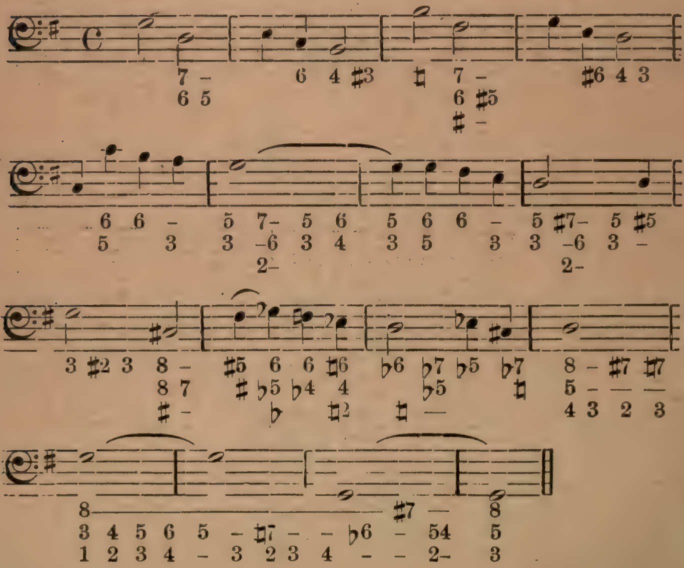

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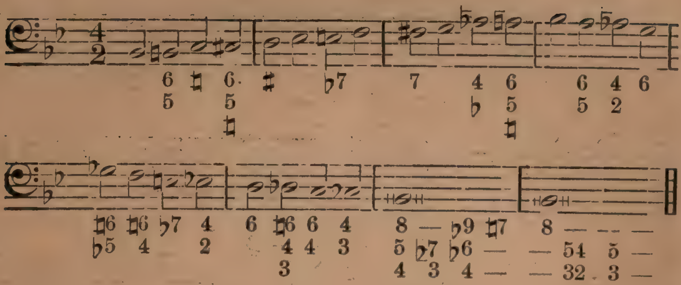

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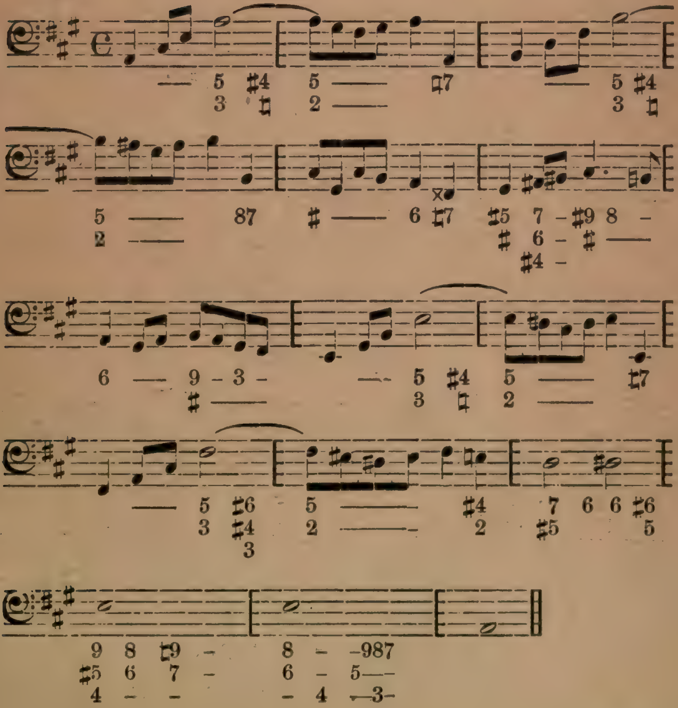

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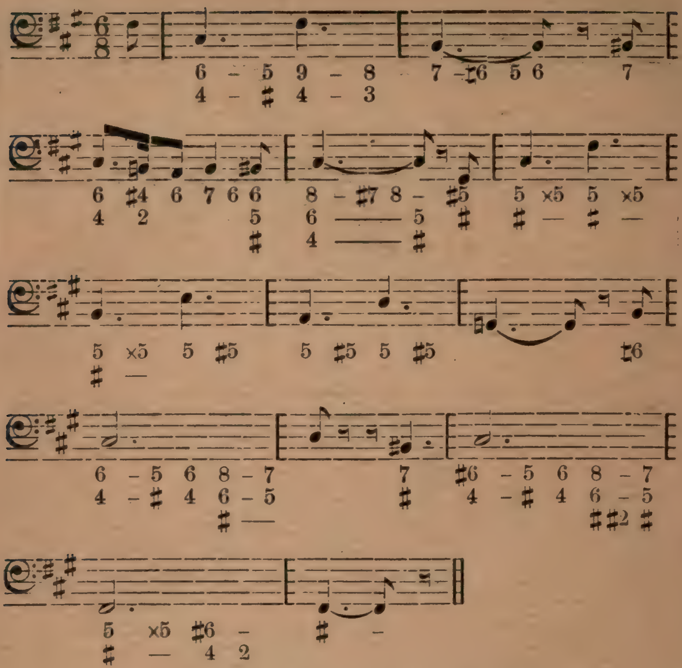
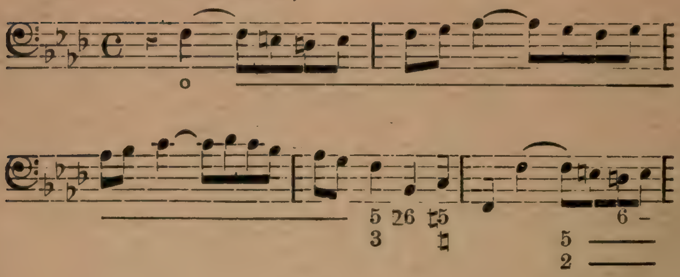


32. (*Tasto solo.*)



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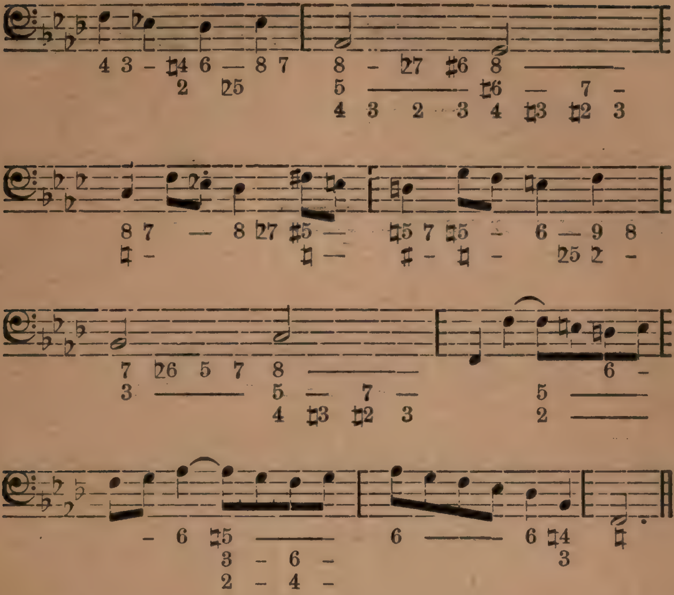
32.—*Continued.*



For the purpose of practice, the above figured basses may be transposed to other keys, *e*, *g*, a second (major or minor) above or below, and in some cases a third (major or minor) above or below. The Exercises should occasionally be worked in open score. By omitting the figures, advanced students may work the Exercises as unfigured basses.

II.

Harmonize the following unfigured basses and melodies, introducing auxiliary notes and (occasionally) chromatic chords.

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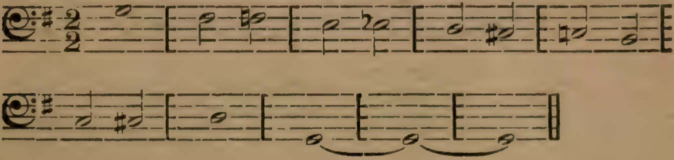

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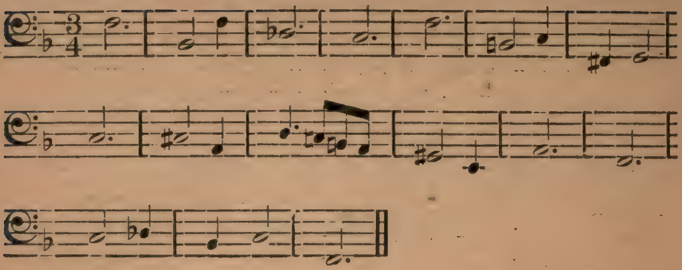

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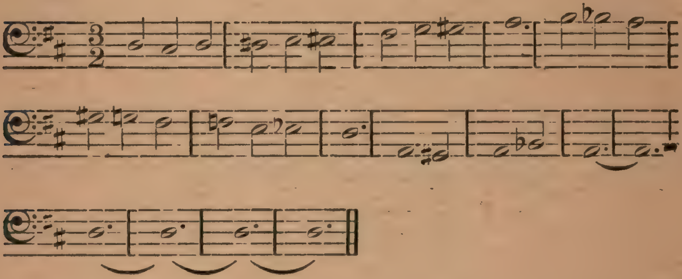

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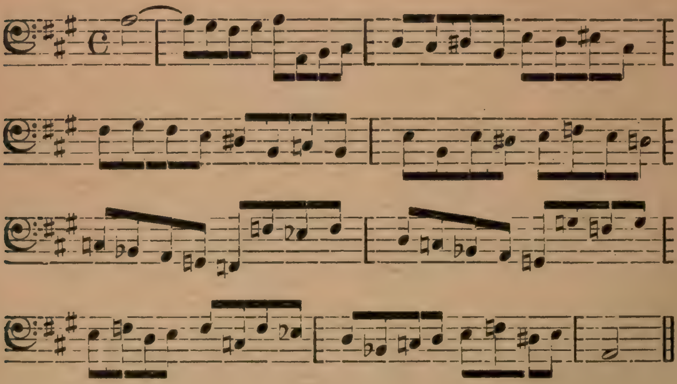

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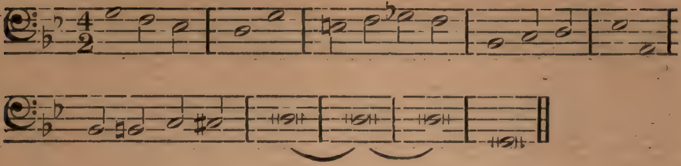

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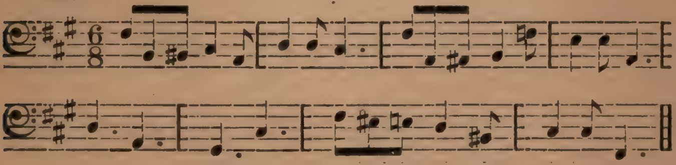

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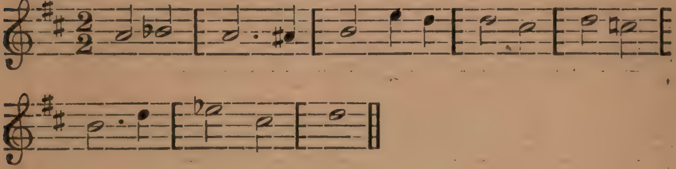

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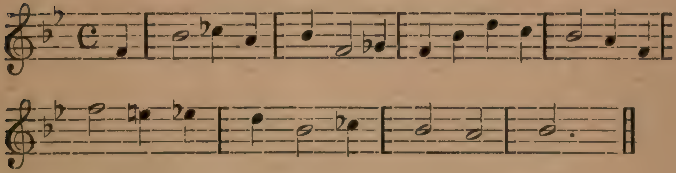

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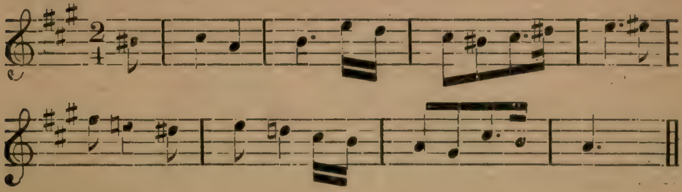

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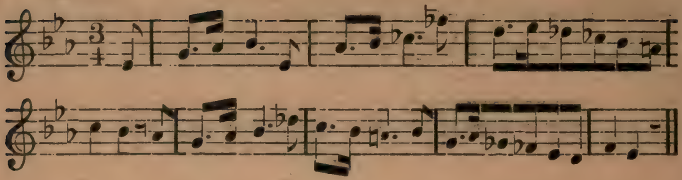

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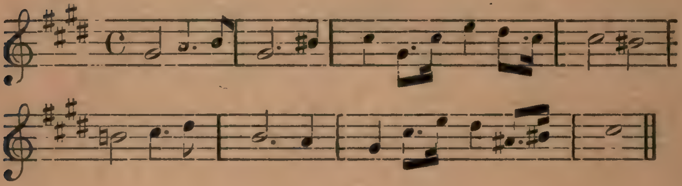

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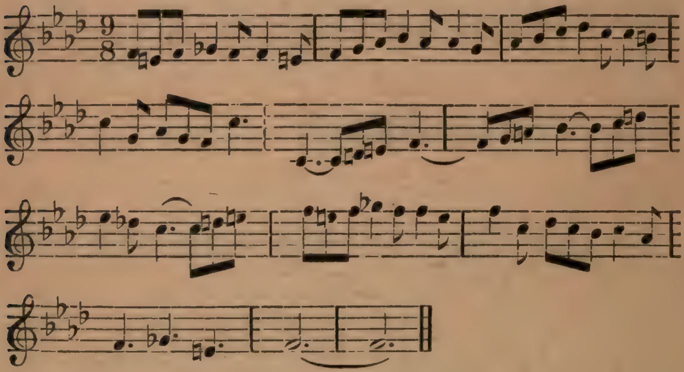
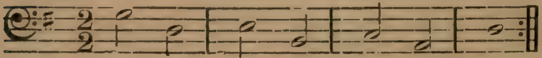


Harmonize the following ground basses. Each bass should be treated in at least four different ways, (1) with simple chords, (2) with suspensions, (3) with auxiliary notes, and (4) with chromatic chords. Modulations to attendant keys may also be introduced. A short coda should be added in each case.

45.



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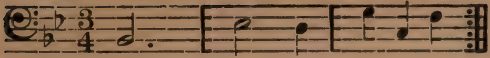

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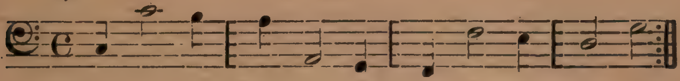

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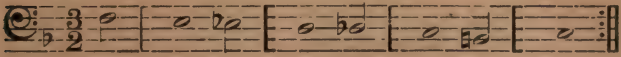

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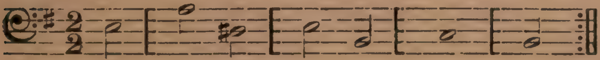

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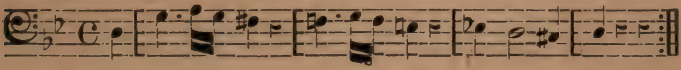


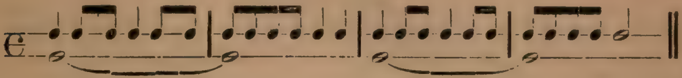
51. Modulate—

(*a*) from D to D flat
(*b*) from B flat to B
(*c*) from E flat to A
(*d*) from A flat to E

by enharmonically changing

(*a*) V7 into Gn6.
(*b*) Gn6 into V7.
(*c*) II+7 into Gn6.
(*d*) Gn6 into I 7–.

52. Clothe the following blank rhythm with harmony, writing the first and second measures on a dominant pedal, and the third and fourth on a tonic pedal.



53. Compose a passage in the key of A, introducing extraneous modulation together with chords and progressions which have been considered in the present chapter.

54. Set the following lines to music.

Yet many a minstrel, in harping, can tell,
How the Red-cross it conquered, the Crescent it fell;
And lords and gay ladies have sighed 'mid their glee,
At the tale of Count Albert and fair Rosalie.

Scott.

APPENDIX.

SYMBOLS.

The symbols employed in the present work by which notes and chords are represented *without the use of words*, may be regarded as forming a system of musical stenography.*

Symbols are of two kinds, namely:—

Melodic, representing a note, and
Harmonic, representing a chord.

Four factors are employed in the formation of these symbols, namely, (1) certain Roman numerals, (2) the Arabic numbers, 1, 2, 3, etc., up to 9, (3) certain signs, and (4) the marks ' and ,.

(1) The Roman numerals, sometimes preceded by one of the signs (3) are employed to indicate notes, whether diatonic or chromatic.

(2) The Arabic numbers are employed to represent intervals, and, when they appear in small type (like the sign for square and cube, etc., in mathematics) to represent the inversions of chords.

(3) The signs, four in number are, +, −, × and o; these are employed to indicate respectively the terms, 'major,' 'minor,' 'augmented' and 'diminished.'

(4) The mark ' is employed to represent a suspension; thus ' for a falling, and thus , for a rising suspension.

The symbols for intervals are formed by placing the sign representing the particular name *after* the Arabic number representing the general name of the interval.

---

* The term 'symbol' which is here used, it is believed, for the first time in connection with the subject of harmony, was suggested by the use of the same word in chemistry, astronomy, etc, where it is employed (as in the present work) to indicate a certain significant mark—letter, figure or sign—which stenographically represents the name of *something* under consideration. The derivatives, *symbolic* (having reference to symbols) and *symbolize* (to mark with symbols) are occasionally also employed in this work.

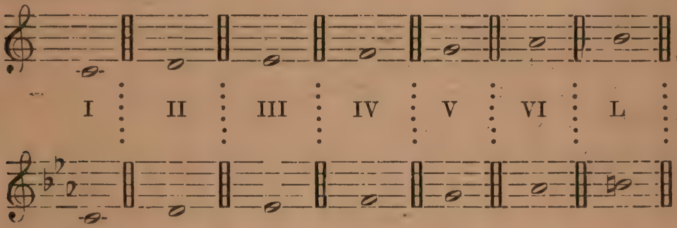
Thus, for example : –

2 + indicates a major second ;
3 – " a minor third ;
4 × " an augmented fourth ;
5 ○ " a diminished fifth.

The sign + indicates the term 'perfect,' when it is employed after the numbers 4, 5 and 8.

The student should call each symbol by its proper name ; for example, a major second should not be read as 'two plus,' nor a minor third as 'three minus,' etc.

The melodic symbols for the various degrees of the major and minor scales, the latter in its harmonic form, are shown in the following example.



It will be seen that the same symbol is employed for the mediant in both keys ; when it is desirable to distinguish between the major and minor mediants, the signs + and – respectively are placed before the symbol, thus, +III and –III. The same may be said of the two submediants. In the melodic form of the minor scale, the submediant in ascending is, therefore, +VI, while in descending it is –VI. The technical name (employed in the present work) for the seventh degree in the descending form of the minor scale is 'subtonic' ; the symbol employed for this note is VII.

The symbol L is employed for the leading-note instead of VII (as might have been expected) because in the first place, it is easier to write and, what is frequently an important consideration, it occupies less space than VII ; and, in the second place, because a distinctive symbol more readily directs the attention of the student to the characteristics of the note (See page 14). A point of small importance but one not unworthy of a passing notice is to be seen in the number 50 which is the numerical significance of the Roman numeral L, while 5o (as was shown above) is the symbol for the interval of the diminished fifth, an interval invariably associated with the leading-note in both the major and minor modes.

The technical name (or symbol) for each degree of the scale should invariably be employed in preference to the alphabetical name; for the alphabetical name varies with each new scale but the technical name always remains the same. Furthermore, it may here be said, that each degree of the scale possesses a certain individuality peculiar to itself, which may be termed its *æsthetic character*; e. g., I—**Constancy**, II—**Desire**, III—**Ease**, IV—**Faith**, V—**Gladness**, VI—**Adversity** and L—**Brightness.** These terms, which are suggestive only of the æsthetic character of each note, have been chosen so as to be easily remembered by the student; the initial letters, it will be seen, form the scale of C.

The following table comprises the melodic symbols for the notes of the modern enharmonic scale of C (See page 34); together with the technical names employed (in the present work) for the notes of this scale.* The alphabetical name and tonal character of each note are also included. The table should be read upwards.

ALPHABETICAL NAME.	MELODIC SYMBOL.	TECHNICAL NAME.	TONAL CHARACTER.
B.	L	Leading-note.	Diatonic.
B flat.	VII	Subtonic.	Perfect chromatic.
A.	+VI	Major submediant.	Diatonic.
A flat.	−VI	Minor submediant.	Imperfect chromatic.
G sharp.	×V	Hyper-dominant.	" "
G.	V	Dominant.	Diatonic.
F sharp.	×IV	Inter-dominant.	Perfect chromatic.
F.	IV	Subdominant.	Diatonic.
E.	+III	Major mediant.	"
E flat.	−III	Minor mediant.	Imperfect chromatic.
D sharp	×II	Hyper-supertonic.	" "
D.	+II	Major supertonic.	Diatonic.
D flat	−II	Minor supertonic.	Imperfect chromatic.
C sharp.	×I	Hyper-tonic.	" "
C.	I	Tonic.	Diatonic.

*It is with a feeling of much diffidence that certain new technical names are here introduced, but at the same time it is under the conviction that they will supply a long-felt want.

The perfect chromatics—the inter-dominant and the subtonic—are so called because they are employed in chord construction in one form only; the imperfect chromatics, by enharmonic change, are employed in both forms.

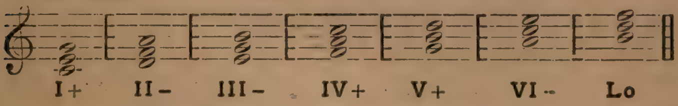
The notes G flat and A sharp are sometimes employed as chromatic auxiliary notes, but they have, it may here be said, no harmonic relationship with the key of C. For the sake of completeness, should it at any time be necessary to refer to such notes, the technical names, Hypo-dominant (oV) and Hyper-submediant (× VI) may be respectively employed.

Equal temperament, that is to say, the division of the octave into twelve equal semitones, is the fundamental principle of all that appertains to modern music. The above scale, it will be seen, contains two distinct kinds of semitones—the diatonic and the chromatic—but these must be regarded as being absolutely equal in point of size. Scientifically, the ratio of the former is as 15 : 16, and that of the latter as 24 : 25; in other words, theoretically D flat (for example) is of slightly higher pitch than C sharp: in equal temperament however, these two notes—D flat and C sharp—are tempered, that is to say, tuned into one and the same note. This theory of equality can alone justify the chromatic progressions and the enharmonic modulations of modern composers.

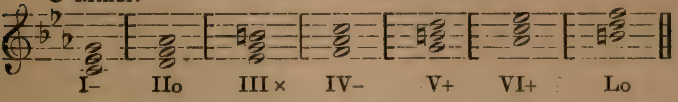
Harmonic symbols are formed from melodic symbols by the addition of numbers, signs and marks, according to the character of the chord; the melodic symbol indicates the root of the chord.

The triads as they occur in the keys of C major and minor are shown in the following example.

C Major.

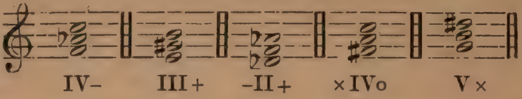


C Minor.

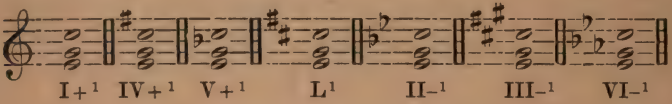


The signs, + and −, etc,. as a matter of fact, are frequently omitted, being understood; the student, however, should employ them at first, and indeed until he is perfectly familiar with the character of the various triads. In reading the symbols, the student should be careful to employ the correct technical term; for example, I+ should be read as 'the tonic major triad (or chord),' and not as 'one plus.'

The following example illustrates some of the chromatic triads (in the key of C) with their symbols.

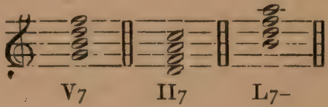


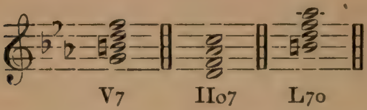
The symbols for the first and second inversions of triads are formed by placing the small figures 1 and 2 respectively, after the sign indicating the character of the chord; thus, I$+^1$, the first inversion of the tonic major chord, and I$-^2$, the second inversion of the tonic minor chord. The following example illustrates the first inversion of the triad of C, as it occurs in seven different major keys.



The sign 'o,' it will be seen, is omitted after the symbol L; this is invariably the case when L^1 has a dominant character and resolves on I or I^1; when it resolves upon III –, the sign 'o' should be added, thus, Lo^1.

The following example illustrates the symbols employed for the chords of the seventh in most frequent use, in both C major and C minor. The sign + is usually omitted after V, as this chord is invariably major.

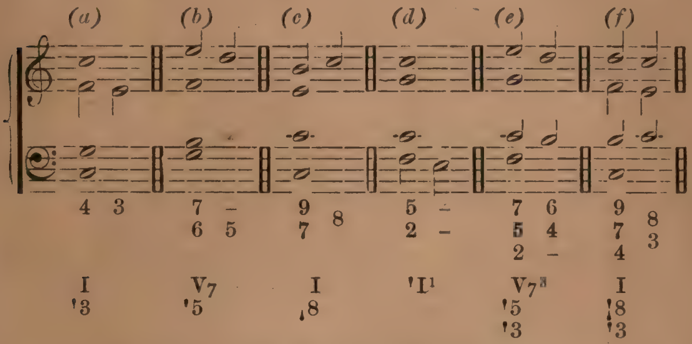




The symbols for the inversion of chords of the dominant seventh are formed thus V7^1, V7^2, and V7^3.

The symbols for the chords of the dominant ninth are $V9+$ (or simply $V9$) and $V9-$. L_7- and L_7o are treated as distinct chords, they are not regarded as being $V9+^1$ and $V9-^1$ respectively; in the latter chords the dominant is always present while in the former it is never present.

The following example illustrates the formation of symbols in connection with suspensions.



(*a*) The tonic chord with the third suspended.

(*b*) The dominant seventh with the fifth suspended.

(*c*) The tonic chord with the octave suspended by the note below.

(*d*) The first inversion of the tonic chord with the bass suspended.

(*e*) The third inversion of the dominant seventh with the third and fifth suspended.

(*f*) The tonic chord with a triple suspension.

When the suspension is in the bass, the mark ' is placed before the Roman numeral.

The symbols for other discords, both diatonic and chromatic, will be given as these chords severally occur in the course of the work; sufficient, it is hoped, has been said to explain the theory upon which the symbols in general are constructed.

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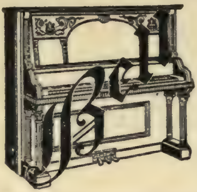

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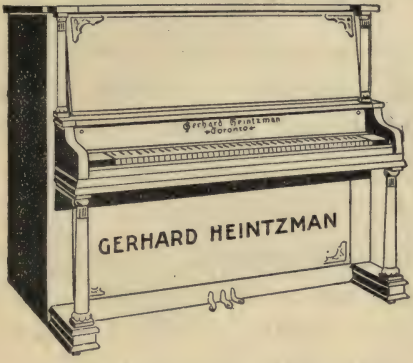

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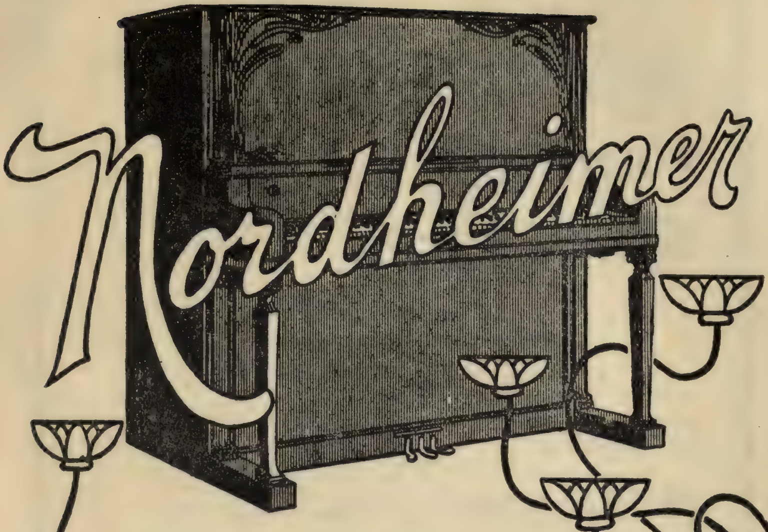

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